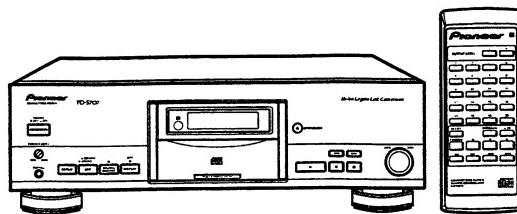


Service Manual

Pioneer



ORDER NO.
RRV1981

COMPACT DISC PLAYER **PD-S707**

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	PD-S707		
MY	○	AC220-230V	—
MV	○	AC220-230V	—
SD	○	AC110V/120-127V/220-230V/240V	With the voltage selector
HPW	○	AC230-240V	—

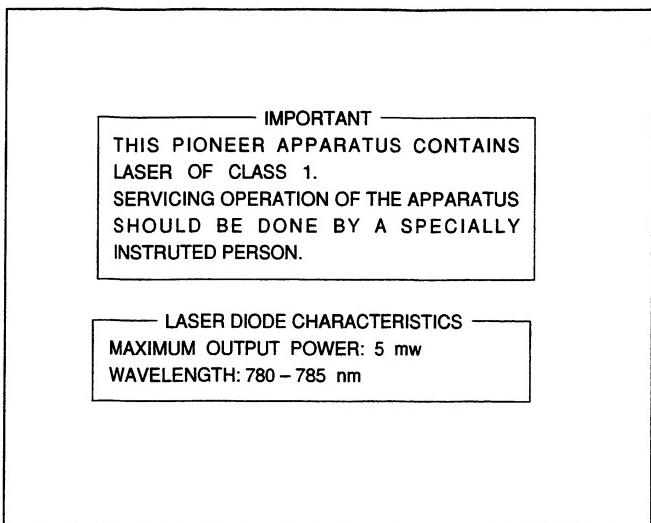
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5. PCB PARTS LIST	26	8. PANEL FACILITIES AND SPECIFICATIONS	41
6. ADJUSTMENT	30		

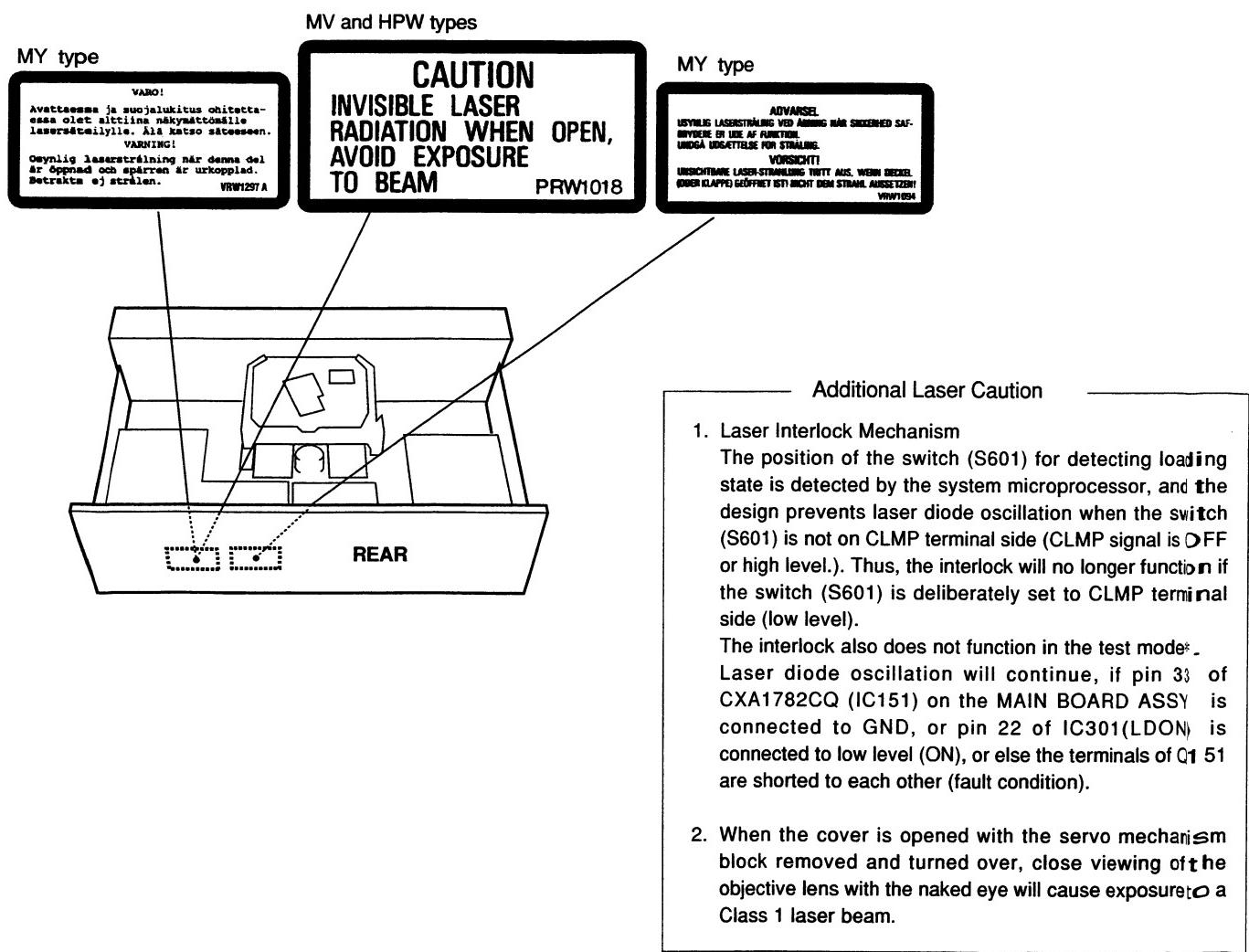
PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Wheelock Place, Singapore 238880
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T-ZZB JULY 1998

1. SAFETY INFORMATION



LABEL CHECK

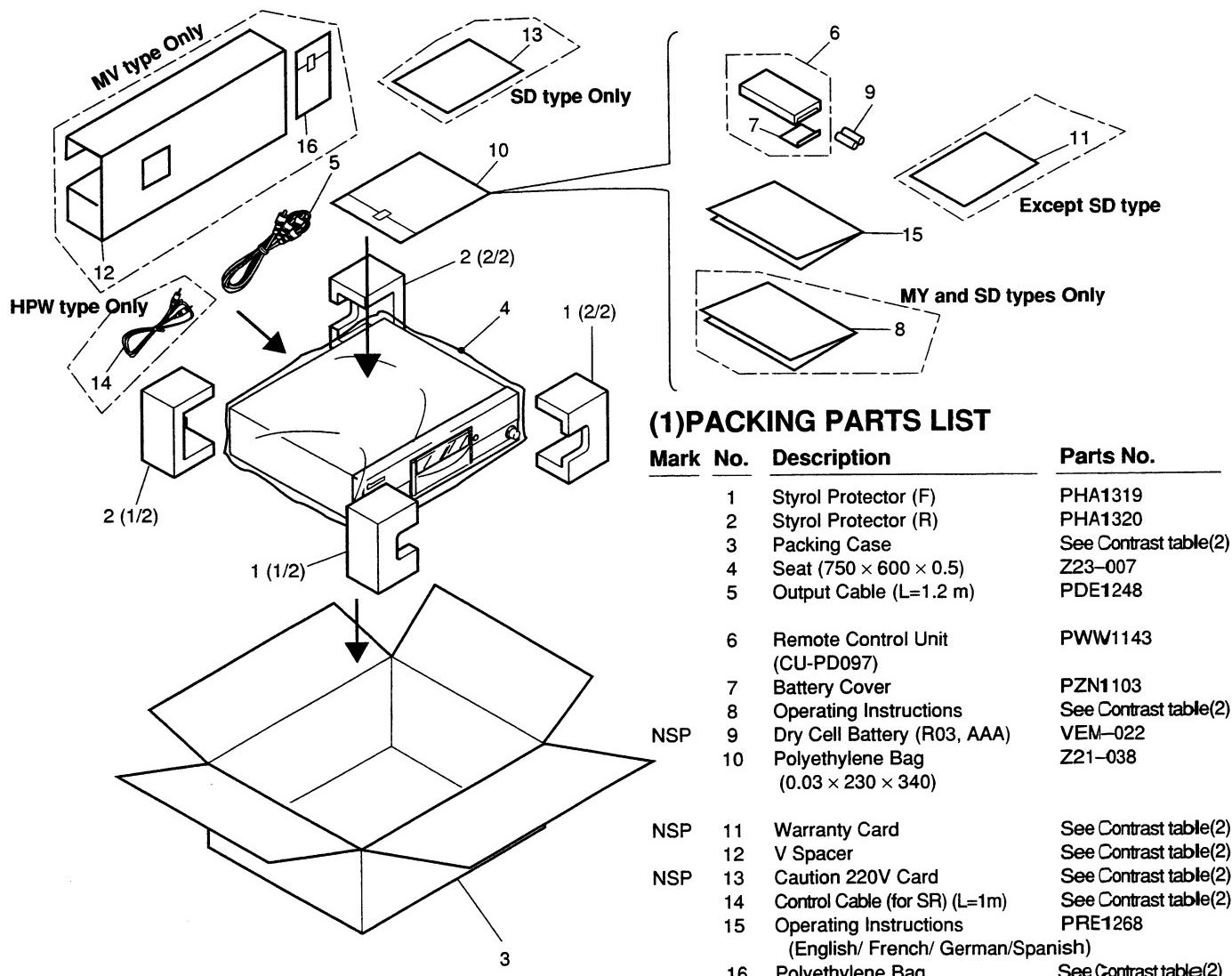


* Refer to page 31 .

2. EXPLODED VIEWS AND PARTS LIST

- NOTES :
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screw adjacent to  mark on the product are used for disassembly.

2.1 PACKING

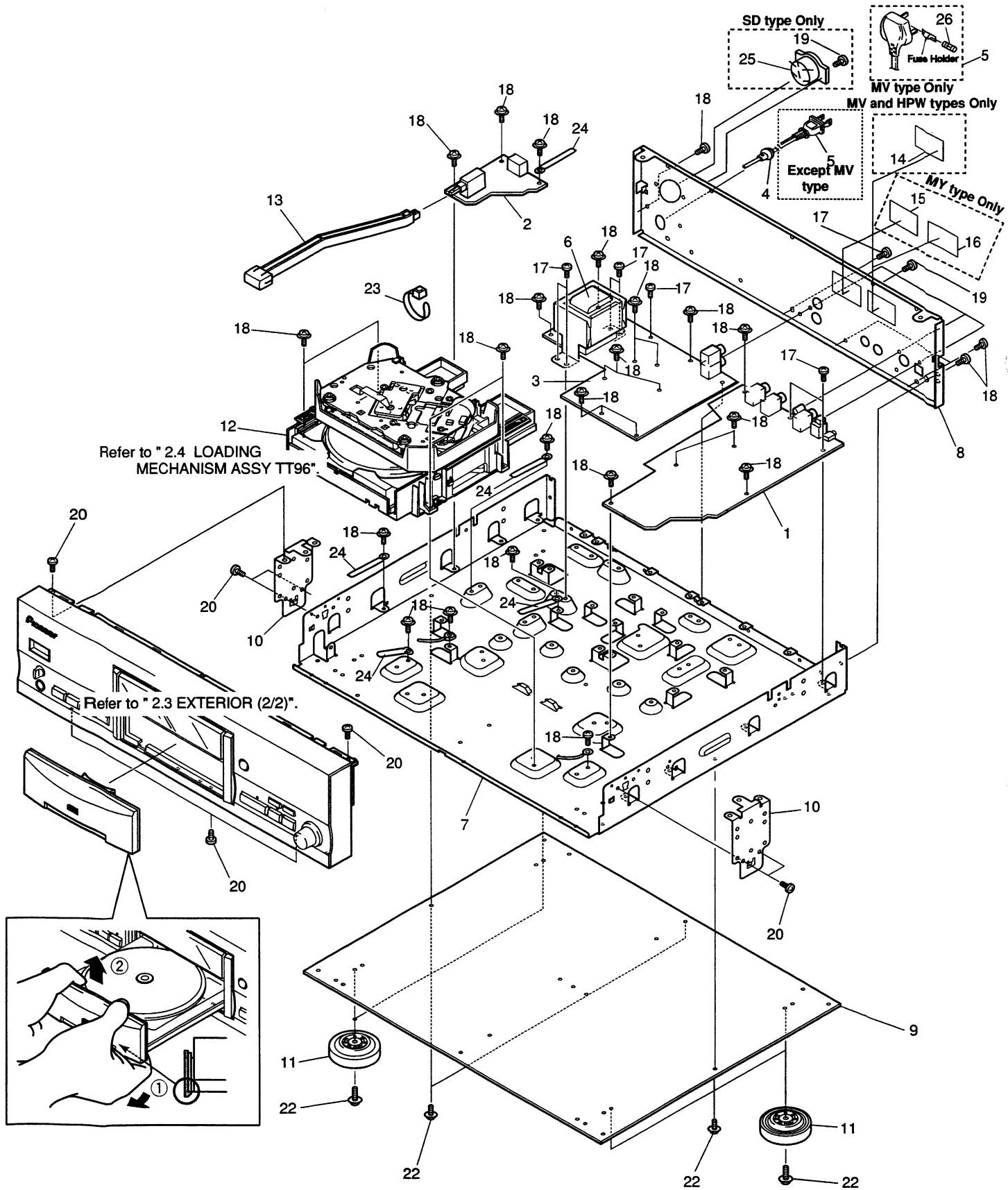


(2) CONTRAST TABLE

PD-S707/MY, MV, SD and HPW are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			MY type	MV type	SD type	HPW type	
NSP	3	Packing Case S707	PHG2321	PHG2328	PHG2327	PHG2327	
	8	Operating Instructions (Italian/Dutch/ Swedish/ Portougeuse)	PRD1032	Not used	Not used	Not used	
	8	Operating Instructions (Chinese)	Not used	Not used	PRD1030	Not used	
	11	Warranty Card	ARY7022	ARY7008	Not used	ARY7022	
	12	V Spacer	Not used	PHC1089	Not used	Not used	
NSP	13	Caution 220V Card	Not used	Not used	ARR7003	Not used	
	14	Control Cable	Not used	Not used	Not used	PDE1247	
	16	Polyethylene Bag	Not used	Z21- 013	Not used	Not used	

2.2 EXTERIOR (1/2)



(1) EXTERIOR (1/2) PARTS LIST

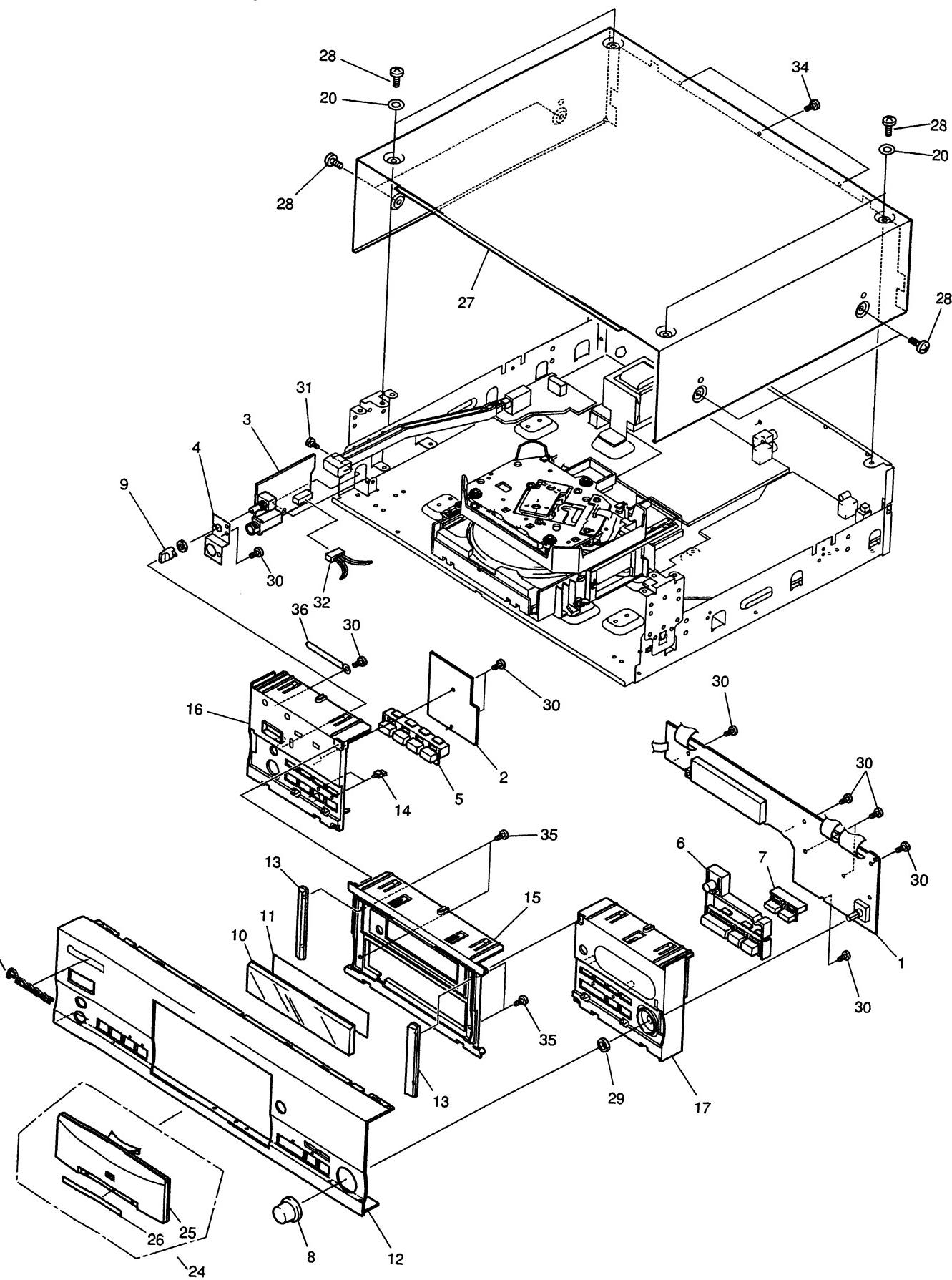
Mark	No.	Description	Parts No.
NSP	1	MAIN BOARD ASSY	See Contrast table(2)
	2	PRIMARY SWITCH ASSY	See Contrast table(2)
	3	POWER BOARD ASSY	See Contrast table(2)
	4	Strain Relief	CM-22B
⚠	5	AC Power Cord	See Contrast table(2)
⚠	6	Power Transformer	See Contrast table(2)
NSP	7	Under Base	PNA2446
	8	Rear Base S707	See Contrast table(2)
	9	Bottom Plate	PNA2376
NSP	10	Side Angle	PNB1583
NSP	11	Insulator Assy	VXA2356
	12	Loading Mechanism Assy TT96	PXA1611
	13	Power Knob	PAC1897
	14	Caution Label	See Contrast table(2)
	15	Caution Label	See Contrast table(2)
NSP	16	Caution Label (HE)	See Contrast table(2)
	17	Screw (3x6)	ABA1207
	18	Screw	ABA1011
	19	Screw	BBZ30P080FZK
	20	Screw	BBT30P080FCC
⚠	21	
	22	Screw	IBZ30P100FCC
	23	Binder	ZCA-SKB90BK
	24	Cord Clamper	RNH-184
	25	Voltage Selector	See Contrast table(2)
⚠	26	Fuse (T5A)	See Contrast table(2)

(2) CONTRAST TABLE

PD-S707/MY, MV, SD and HPW are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			MY type	MV type	SD type	HPW type	
NSP	1	MAIN BOARD ASSY	PWZ3793	PWZ3794	PWZ3795	PWZ3796	
	2	PRIMARY SWITCH ASSY	PWZ3869	PWZ3869	PWZ3870	PWZ3869	
	3	POWER BOARD ASSY	PWZ3800	PWZ3801	PWZ3802	PWZ3803	
	5	AC Power Cord	PDG1003	PDG1055	PDG1013	ADG1123	
	6	Power Transformer	PTT1301	PTT1301	PTT1302	PTT1301	
	8	Rear Base S707	PNA2433	PNA2447	PNA2448	PNA2449	
NSP	14	Caution Label	Not used	PRW1018	Not used	PRW1018	
	15	Caution Label	VRW1094	Not used	Not used	Not used	
	16	Caution Label (HE)	VRW1297	Not used	Not used	Not used	
	25	Voltage Selector	Not used	Not used	AKX7001	Not used	
	26	Fuse (T5A)(For AC Power Cord)	Not used	PEK1003	Not used	Not used	

2.3 EXTERIOR (2/2)



(1) EXTERIOR (2/2) PARTS LIST

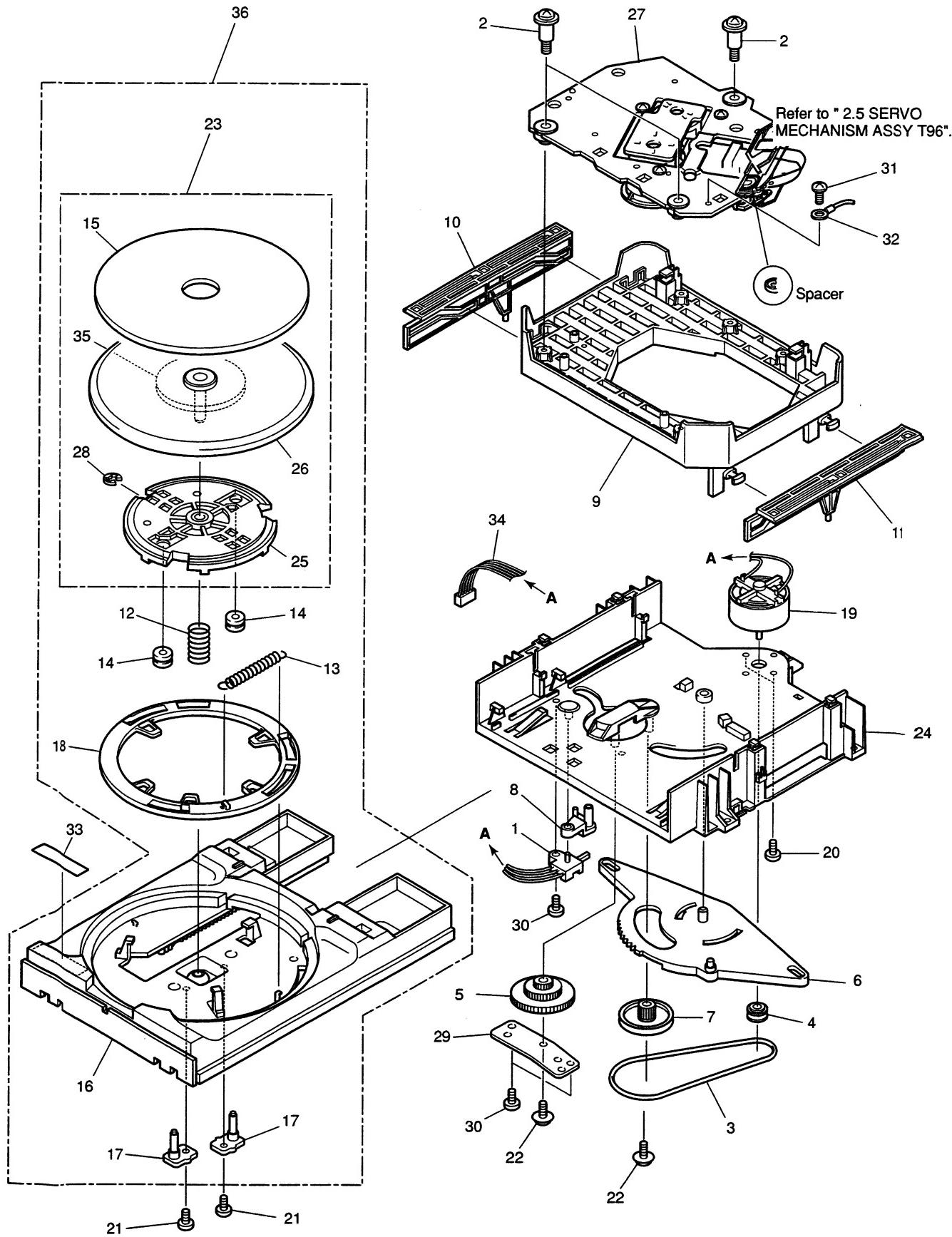
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
NSP	1	DISPLAY BOARD ASSY	See Contrast table(2)		31	Screw	IBZ30P060FMC
NSP	2	FUNCTION BOARD ASSY	PWZ3812		32	Connector Assy 4P	PDE1294
NSP	3	PHONE BOARD ASSY	See Contrast table(2)		33	
	4	H.P. Angle	PNB1582		34	Screw	BBZ30P080FZK
	5	Mode Button S707	PAC1895		35	Screw	BPZ20P060FMC
	6	Play Button	RAC2204		36	Cord Clamper	RNH-184
	7	Manual Button	PAC1894				
	8	Track Knob S707	PAC1898				
	9	Headphone Knob	PAC1707				
	10	Display Window	PAM1766				
	11	FL Sheet	See Contrast table(2)				
	12	Front Panel S707	PAN1370				
	13	Side Sash	PAP1004				
	14	LED Lens	PNW2745				
	15	Panel CDB	PNW2810				
	16	Panel LB	PNW2811				
	17	Panel RB	PNW2812				
	18	Name Plate	PAN1376				
	19					
	20	Washer	ABE1009				
	21					
	22					
	23					
NSP	24	Tray Plate Assy S707	PEA1348				
NSP	25	Tray Panel B	PNW2814				
NSP	26	Tray Badge	PAN1358				
	27	Bonnet Case	PYY1257				
	28	Screw	BBZ40P080FZK				
	29	Nut	NK90FUC				
	30	Screw	PPZ30P080FMC				

(2) CONTRAST TABLE

PD-S707/MY, MV, SD and HPW are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			MY type	MV type	SD type	HPW type	
NSP	1	DISPLAY BOARD ASSY	PWZ3807	PWZ3807	PWZ3807	PWZ3808	
	3	PHONE BOARD ASSY	PWZ3815	PWZ3815	PWZ3816	PWZ3816	
	11	FL Sheet S707	PAM1737	PAM1737	PAM1763	PAM1763	

2.4 LOADING MECHANISM ASSY TT96

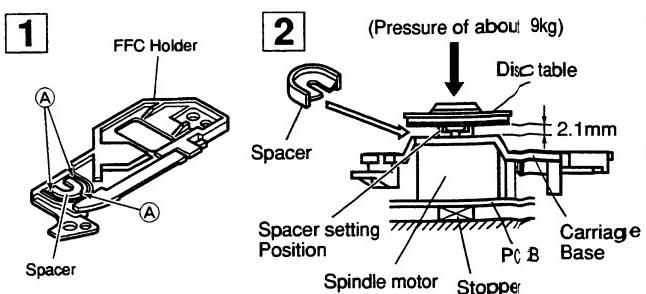


LOADING MECHANISM ASSY TT96 PARTS LIST

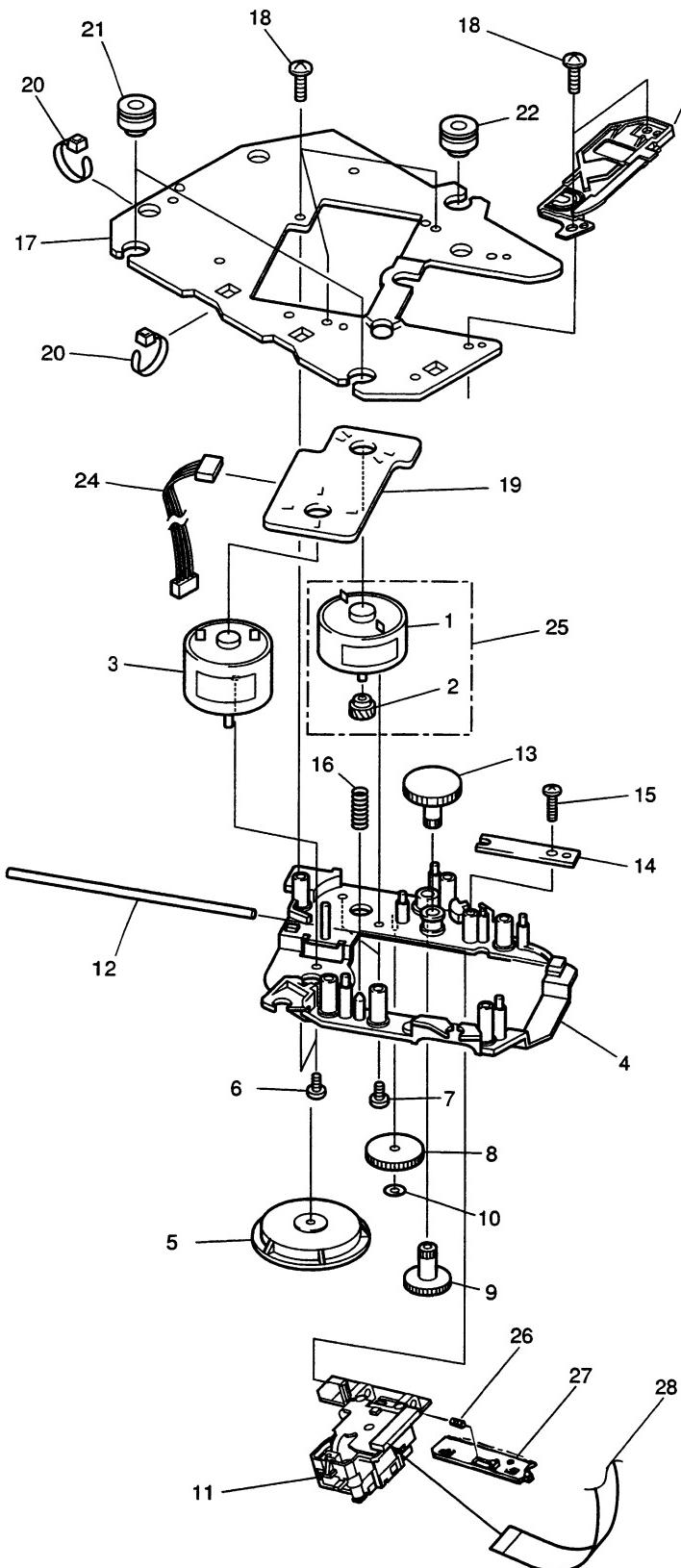
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
1	Lever Switch (S601)	DSK1003		26	Turn Table	PNR1035	
2	Float Screw	PBA1027	NSP	27	Servo Mechanism Assy T96	PXA1606	
3	Rubber Belt	PEB1186		28	E Ring	YE20FUC	
4	Motor Pulley	PNW1634		29	Shaft Holder	PNB1382	
5	Drive Gear	PNW1996		30	Screw	BPZ26P060FMC	
6	Synchronized Lever	PNW2168	NSP	31	Screw	BBZ26P060FMC	
7	Gear Pulley	PNW1998		32	Earth Lead	DE010VF0	
8	SW Head	PNW1999		33	Caution Label	PRW1244	
9	Float Base	PNW2767	NSP	34	Connector Assy 5P	PDE1243	
10	Left Cam	PNW2001		35	Table Base	PXA1382	
11	Right Cam	PNW2002	NSP	36	Tray Assy TT	PXA1397	
12	Float Spring	PBH1120					
13	Lock Spring	PBH1121					
14	Float Rubber	PEB1014					
15	Table Rubber Sheet	PEB1181					
16	Tray	PNW2760					
17	Table Guide	PNW2004					
18	Lock Plate	PNW2005					
19	D.C. Motor (0.75W, LOADING)	PXM1010					
20	Screw	BMZ26P040FMC					
21	Screw	IPZ26P060FCU					
22	Screw	IPZ20P080FMC					
23	Turn Table Assy	PEA1165					
24	Loading Base	PNW2761					
25	Table Shaft Holder Assy	PXA1383					

● How to Install the Disc Table

- [1] Use nipper or other tool to cut the three sections marked **(A)** in figure [1]. Then remove the spacer
- [2] While supporting the spindle motor shaft with the stopper, put spacer on top of the carriage base, and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



2.5 SERVO MECHANISM ASSY T96



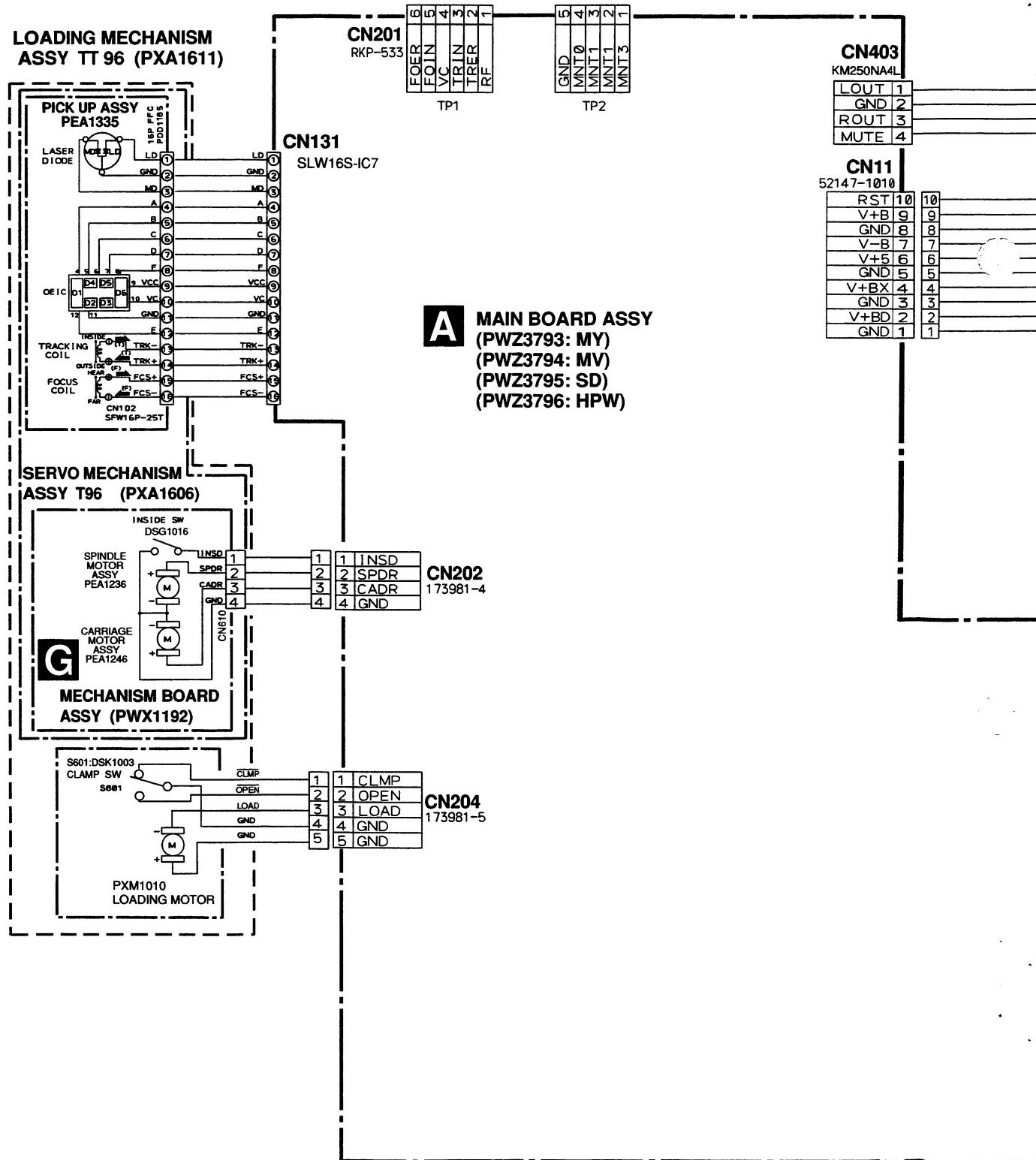
SERVO MECHANISM PARTS LIST

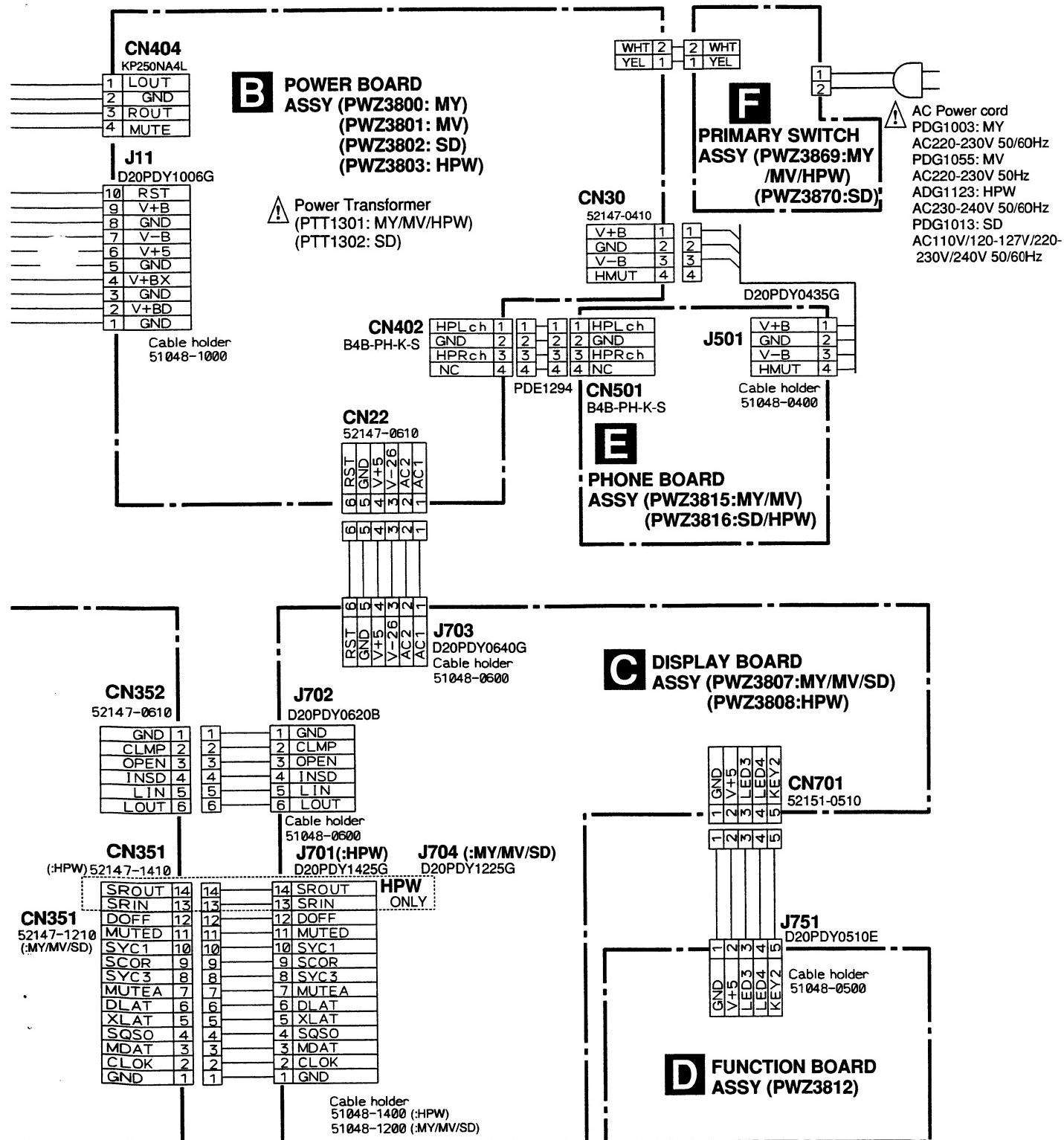
Mark No.	Description	Parts No.
1	Carriage D.C. Motor (0.3W)	PXM1027
2	Pinion Gear	PNW2055
3	Spindle Motor Assy (SPINDLE, with Oil)	PEA1236
4	Carriage Base	PNW2699
5	Disc Table	PNW1067
6	Screw	JFZ20P030FNI
7	Screw	JFZ17P025FZK
8	Gear 3	PNW2054
9	Gear 2	PNW2053
10	Washer	WT12D032D025
11	Pickup Assy	PEA1335
12	Guide Bar	PLA1094
13	Gear 1	PNW2052
14	Gear Stopper	PNB1303
15	Screw	BPZ20P060FMC
NSP		
16	Earth Spring	PBH1132
17	Mechanism Base T.T.96	PNB1592
18	Screw	BPZ26P100FMC
19	Mechanism Board Assy	PWX1192
20	Binder	PEC-107
21	Float Rubber	PEB1031
22	Float Rubber	PEB1170
23	FFC Holder	PNW2734
24	Connector Assy 4P	PDE1238
25	Carriage Motor Assy (CARRIAGE)	PEA1246
26	Rack Spring	PBH1128
27	Rack Holder	PNW2056
28	F.F.C.(16P)	PDD1185

3. SCHEMATIC DIAGRAM

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "PCB PARTS LIST".

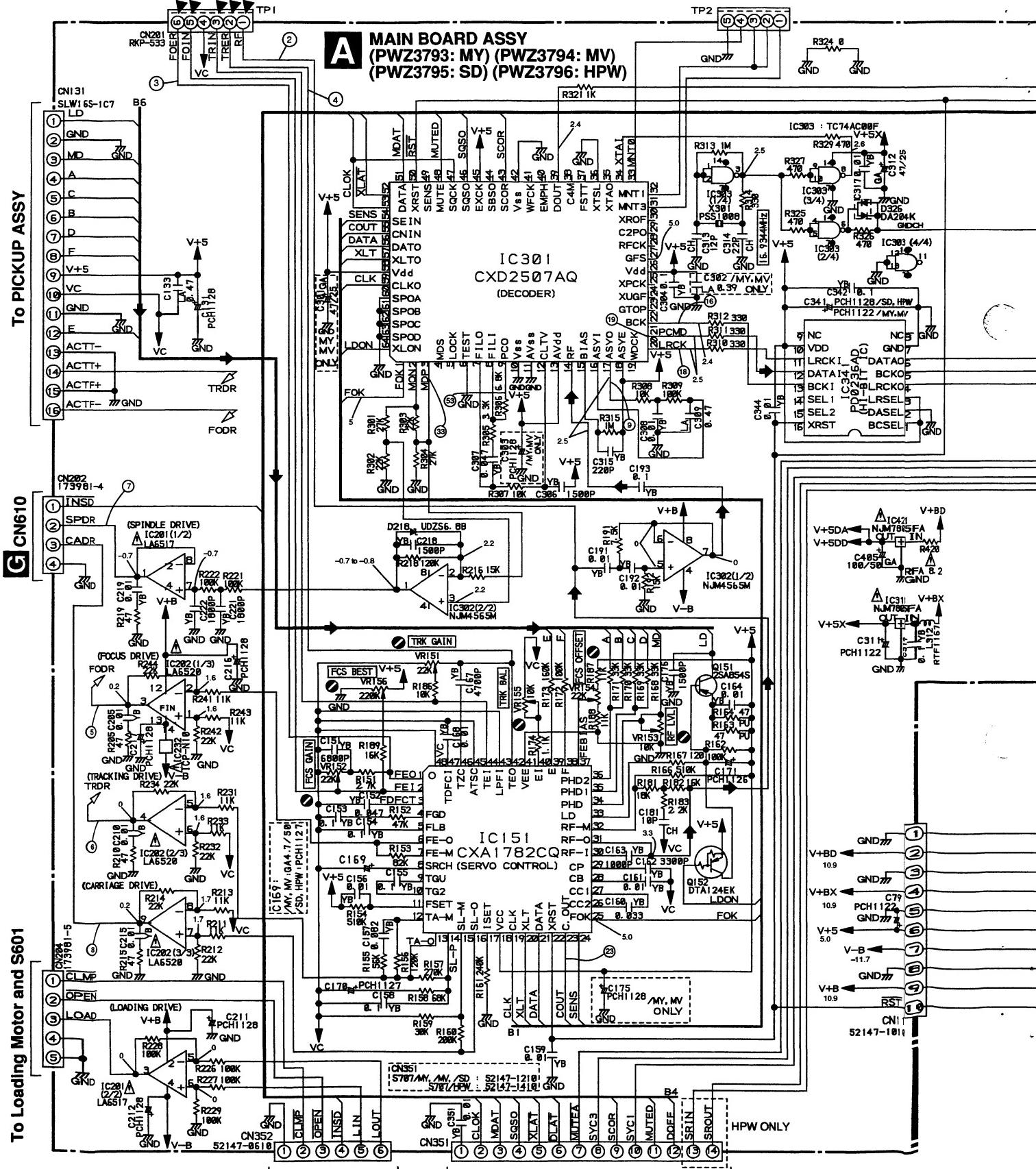
3.1 OVERALL SCHEMATIC DIAGRAM

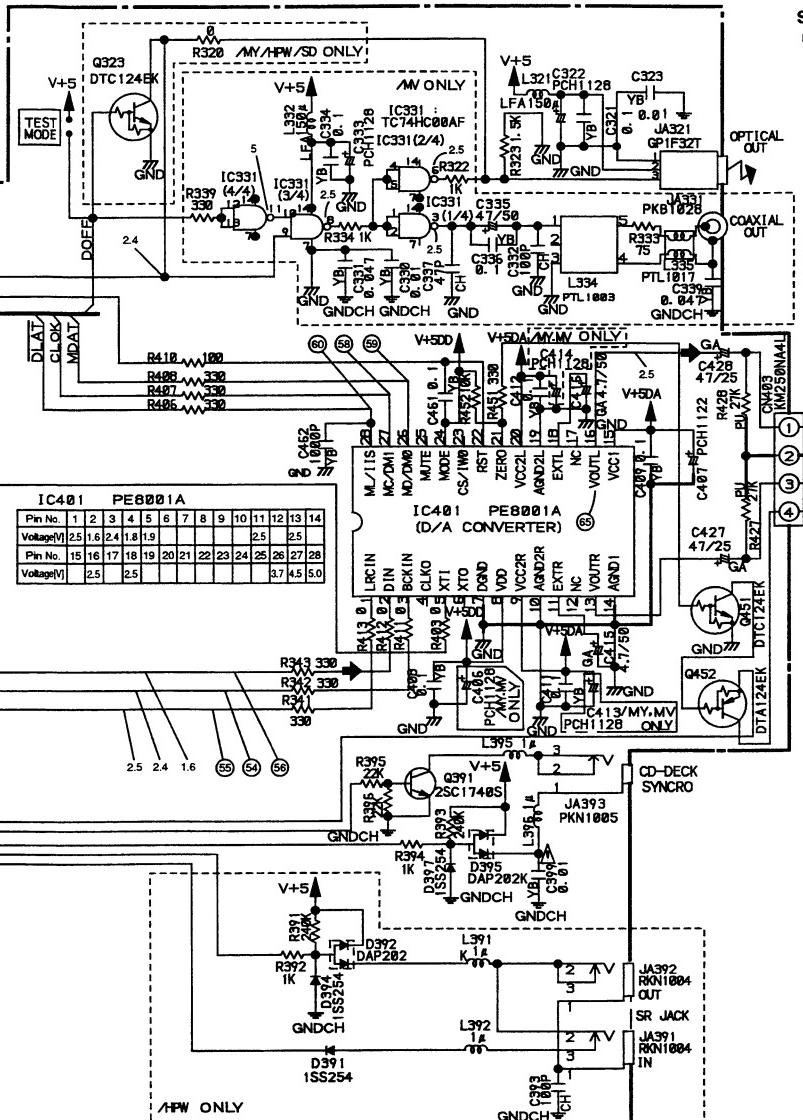




3.2 MAIN BOARD ASSY, POWER BOARD ASSY and PRIMARY SWITCH ASSY

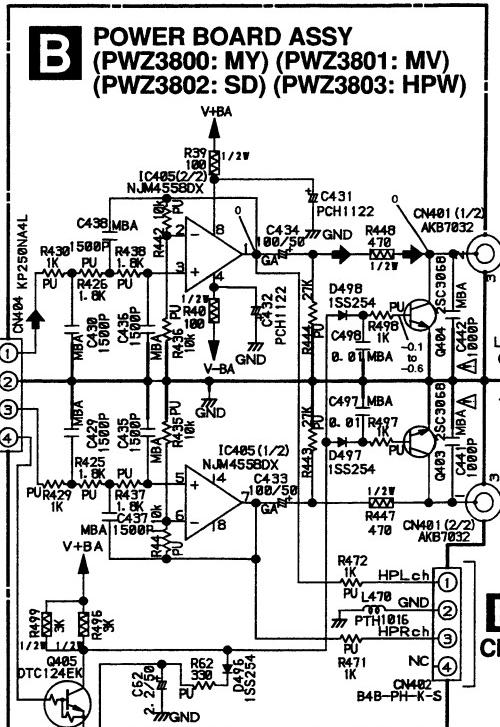
Note	CAPACITORS	RESISTORS	INDUCTORS	OTHERS
MB	Film CQMBMBA PCH 1.9 : 4.7	Unmarked (CHIP) RS 1/185	Axial (LAU)	: CHASSIS GROUND
VA	Ceramic CCFVAYA PCH 1.9 : 3.6	Carbon film RD 1/4PU	Radial (LFA)	
YA	Ceramic CCFVAYB PCH 1.9 : 3.6	Fusible RFA 1/4PL	(LAU)	
CB	Ceramic CCFVAYC PCH 1.9 : 2.2	Audio Carbon film RDR 1/2PM	(LFA)	
BA	Electrolytic CCEGBA PCH 1.9 : 4.7			
GA	Electrolytic CEAGA PCH 1.9 : 4.7			
Unmarked	CEAT PCH 1.127 : 4.7/50			
LA	Film CFTLA			ABC : LOW ACTIVE SIGNAL

**C J702****C J701(HPW) or J704(MY,MV,SD)****A**

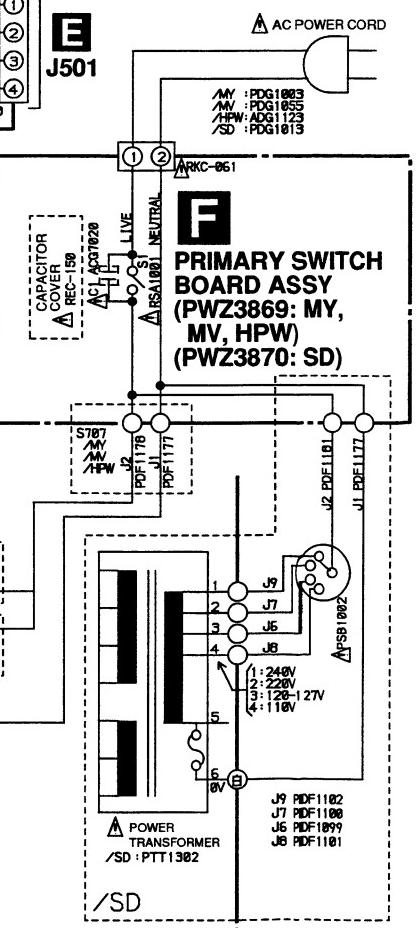


SIGNAL ROUTE
→ : AUDIO SIGNAL ROUTE

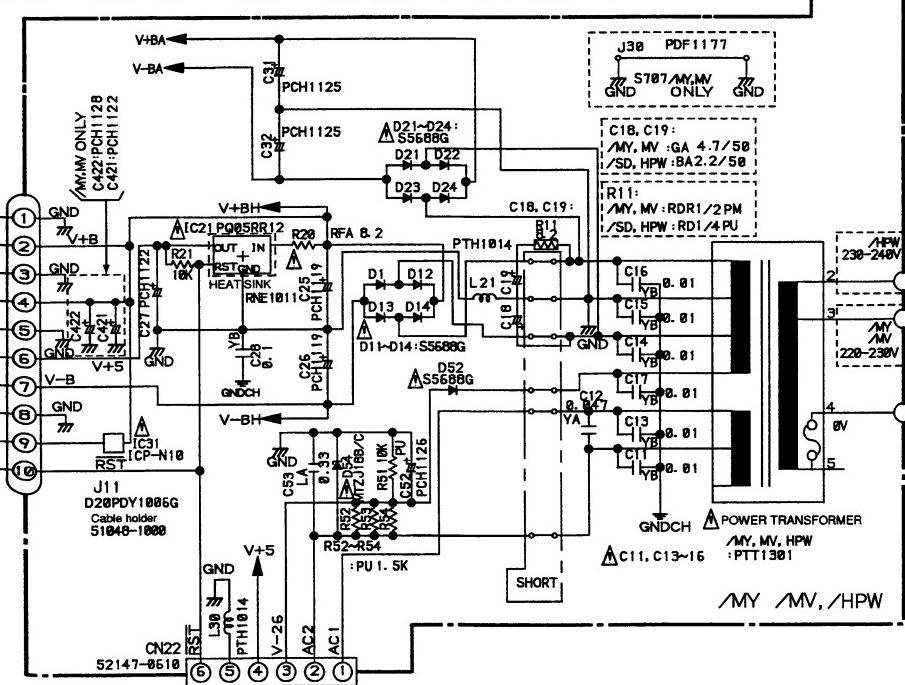
Voltage Measurement



E
CN501



F
**PRIMARY SWITCH
BOARD ASSY
(PWZ3869: MY,
MV, HPW)
(PWZ3870: SD)**

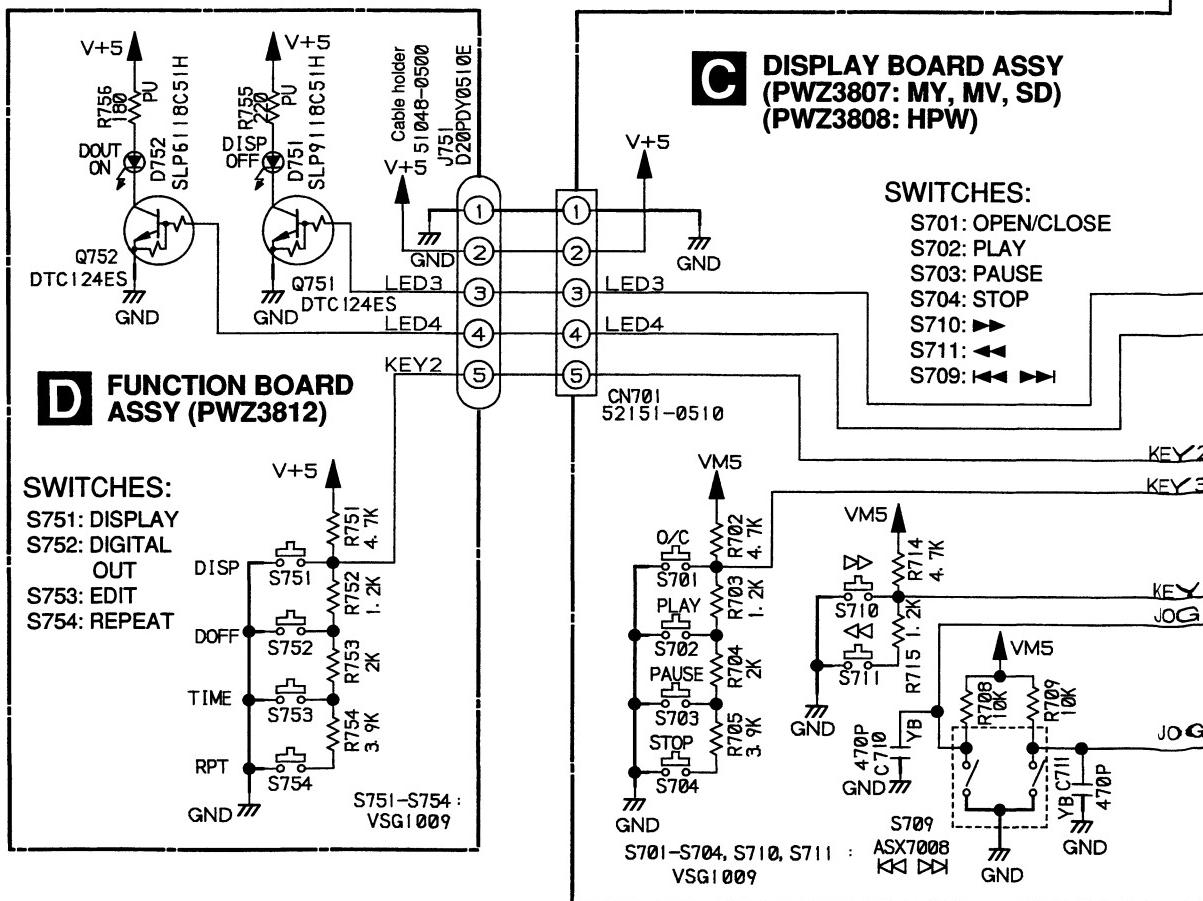
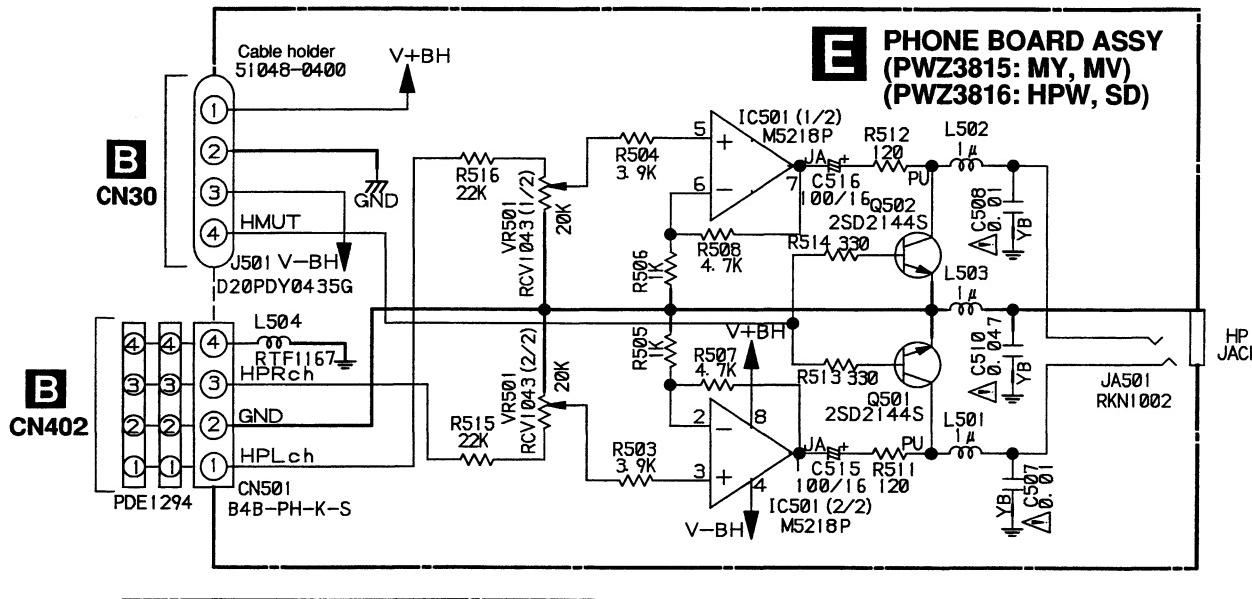


C.1703

A B F

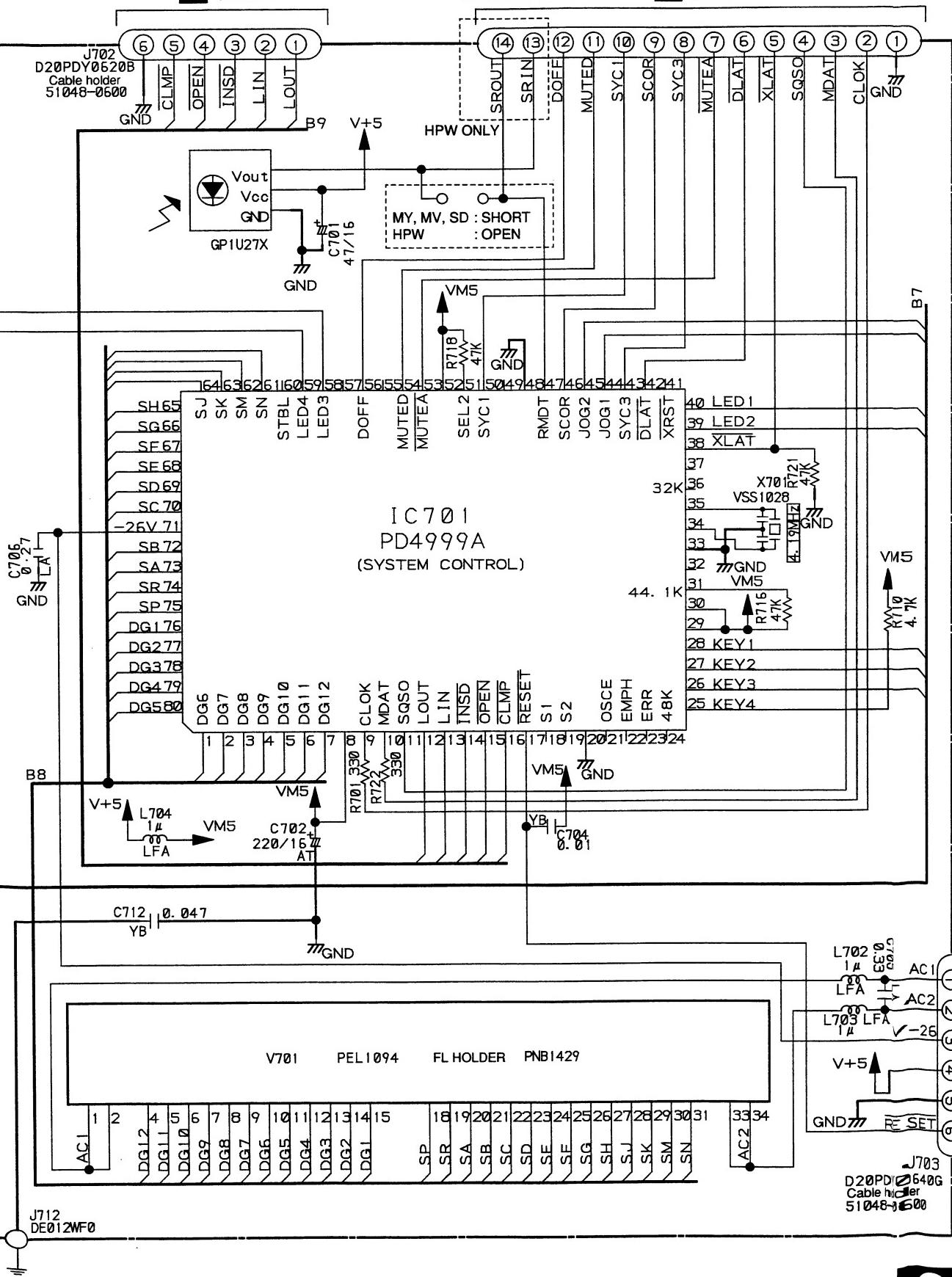
3.3 DISPLAY BOARD ASSY, FUNCTION BOARD ASSY and PHONE BOARD ASSY

Note	CAPACITORS : μF	INDUCTORS : H	OTHERS
	MBA Film CQMB YB Ceramic CKSQYB JA Electrolytic CEJA BA Electrolytic CEBA AT Electrolytic CEAT Unmarked CEAL LA Film CFTLA	Unmarked : Axial (LAU) LFA : Radial (LFA)	ABC : LOW ACTIVE SIGNAL $\underline{}$: CHASSIS GROUND
		RESISTORS : Ω	
		Unmarked : CHIP RS1/10S PU : Carbon film RD1/4PU	



MY, MV, SD: J704 D20PDY1225G
Cable holder 51048-1200
HPW: J701 D20PDY1425G
Cable holder 51048-1400

A CN352



A CN351

B
CN21

C
8

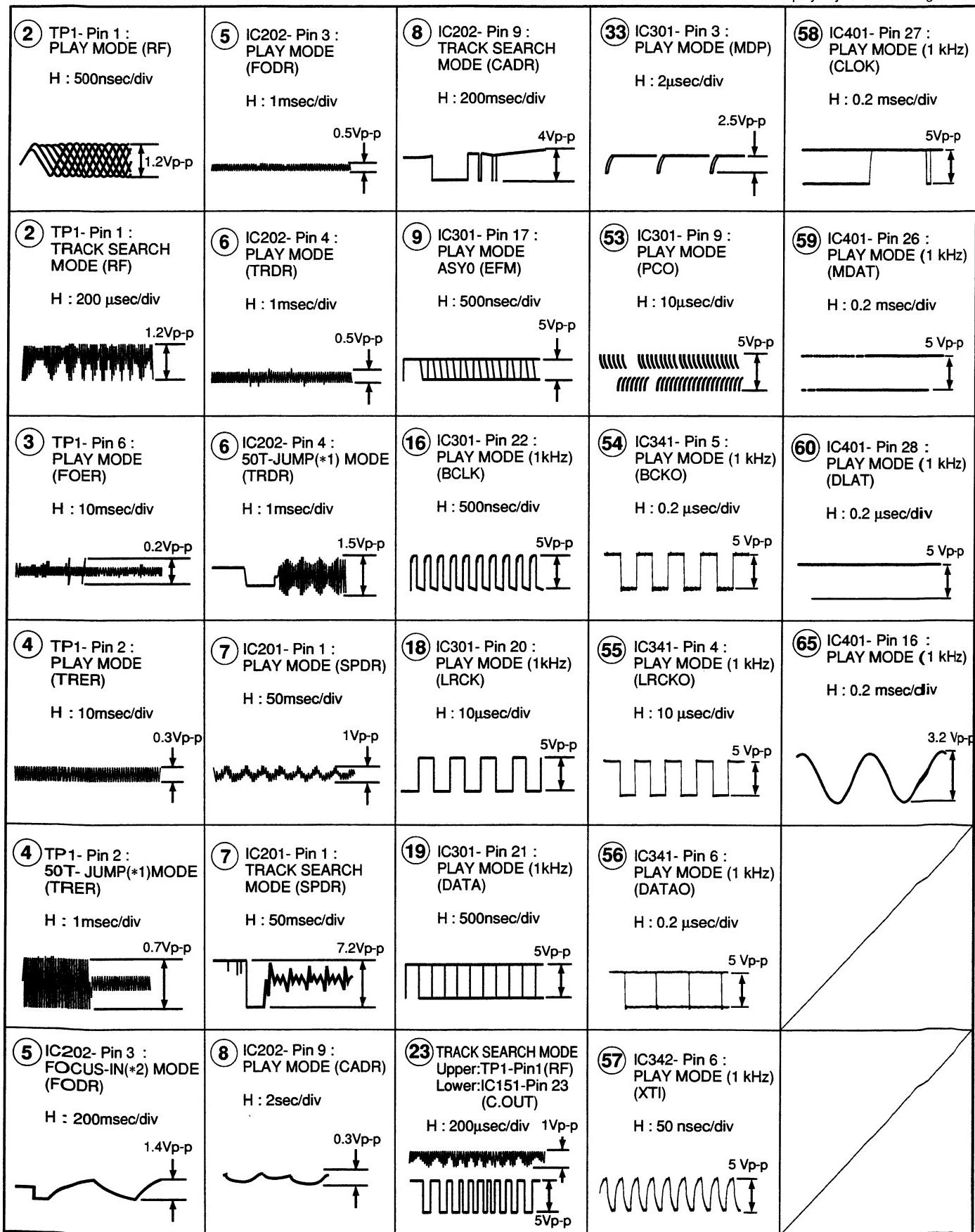
PD-S707

Waveforms

Note: The encircled numbers denote measuring point in the schematic diagram.

*1 50T-JUMP: After switching to the pause mode, press the manual search key.

*2 FOCUS-IN: Press the play key without loading a disc.



4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS:

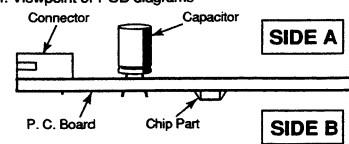
1. Part numbers in PCB diagrams match those in the schematic diagrams.
 2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor

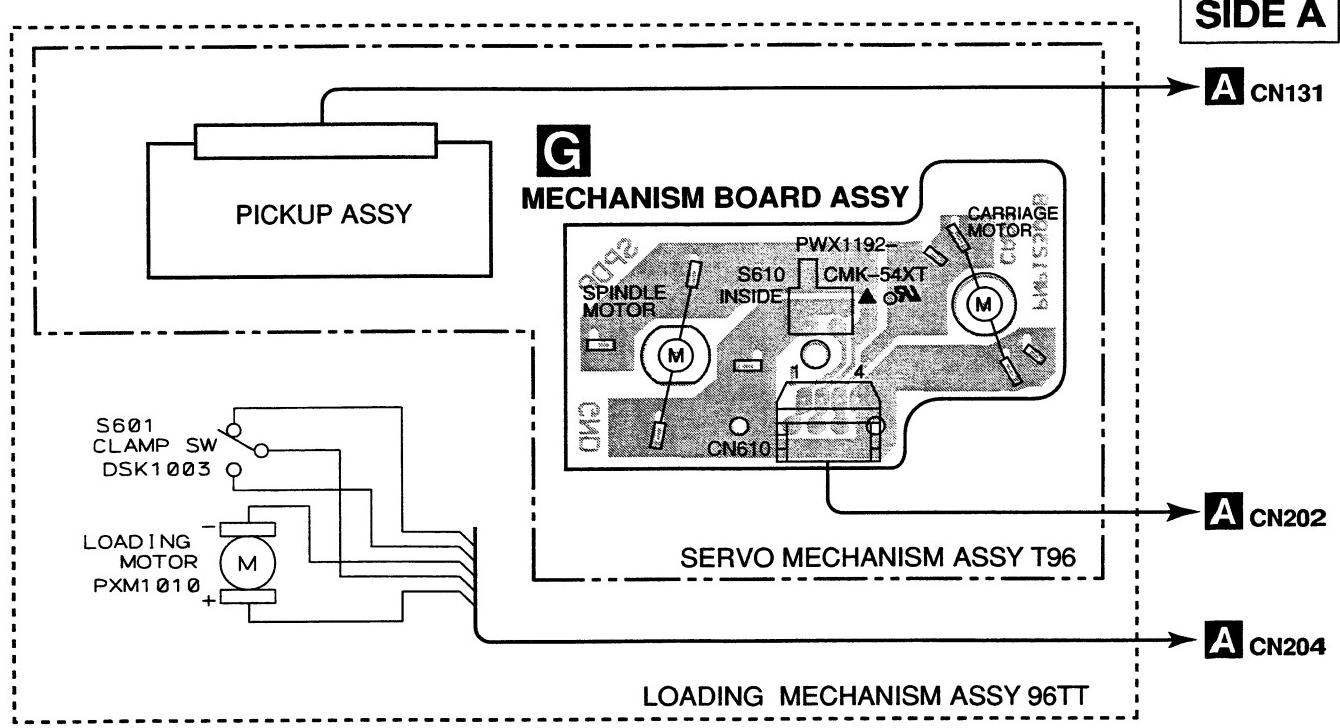
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.

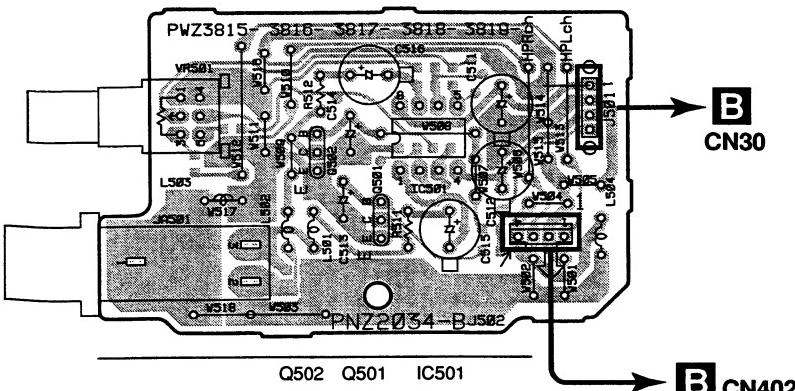
- #### 4 Viewpoint of PCB diagrams



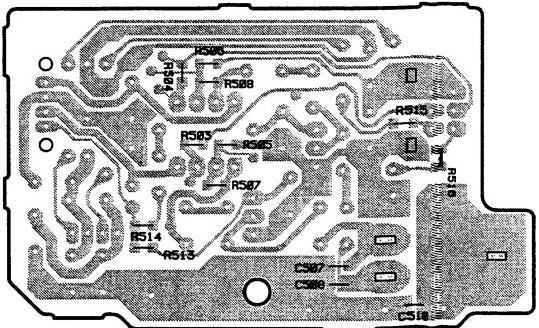
4.1 PHONE BOARD and MECHANISM BOARD ASSEMBLIES



E PHONE BOARD ASSY



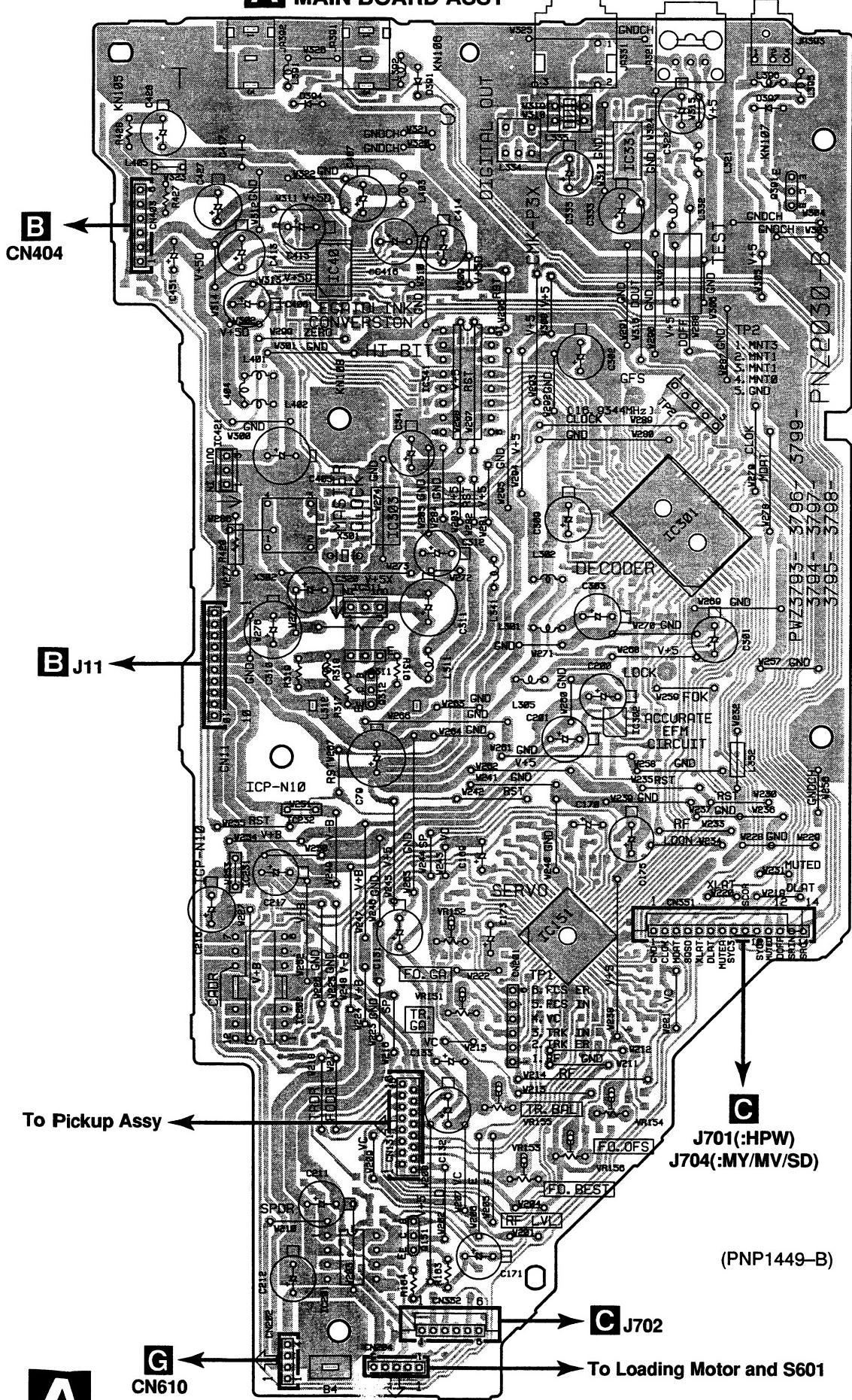
E PHONE BOARD ASSY



(PNP1449-B)

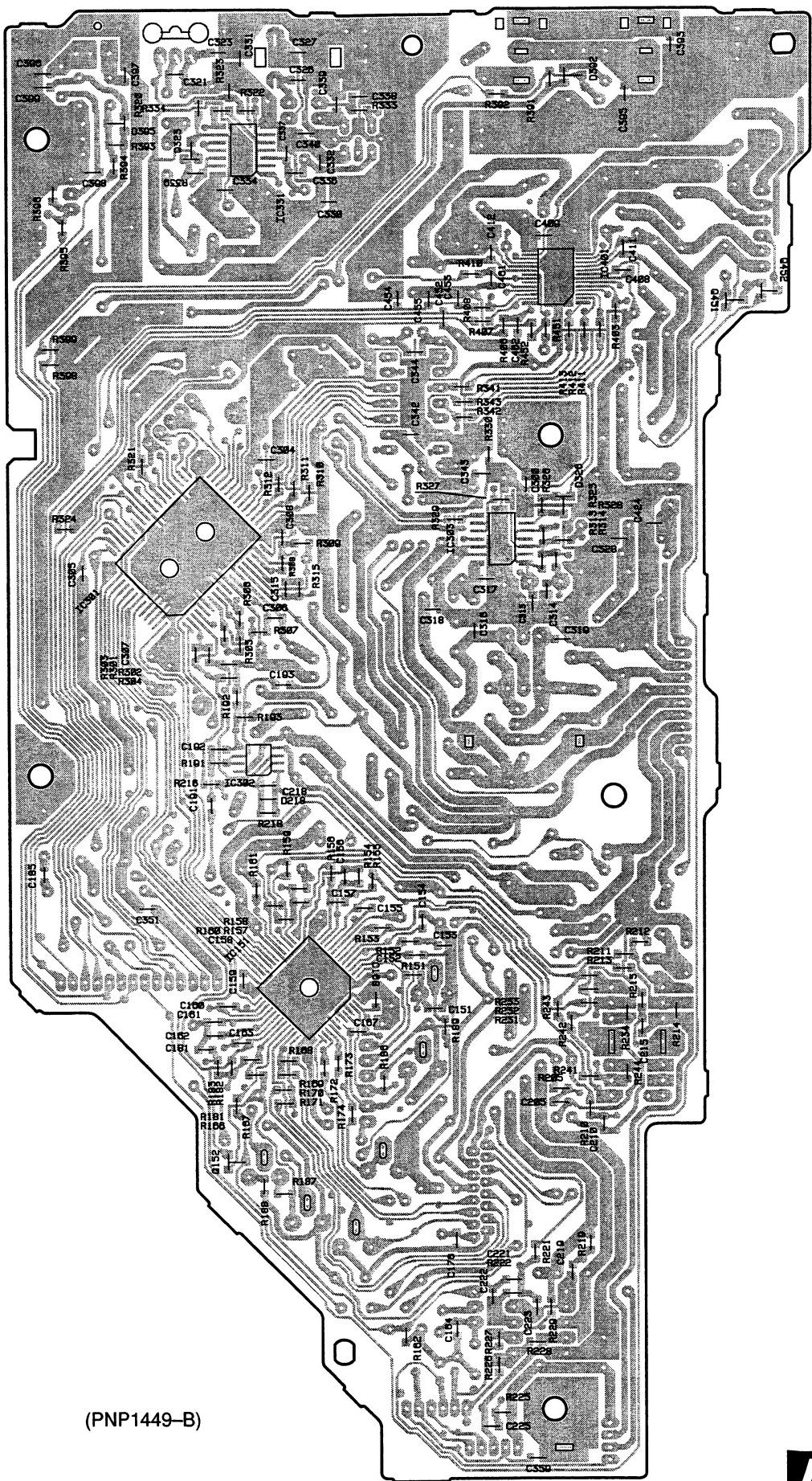
4.2 MAIN BOARD ASSY

SIDE A

A MAIN BOARD ASSY

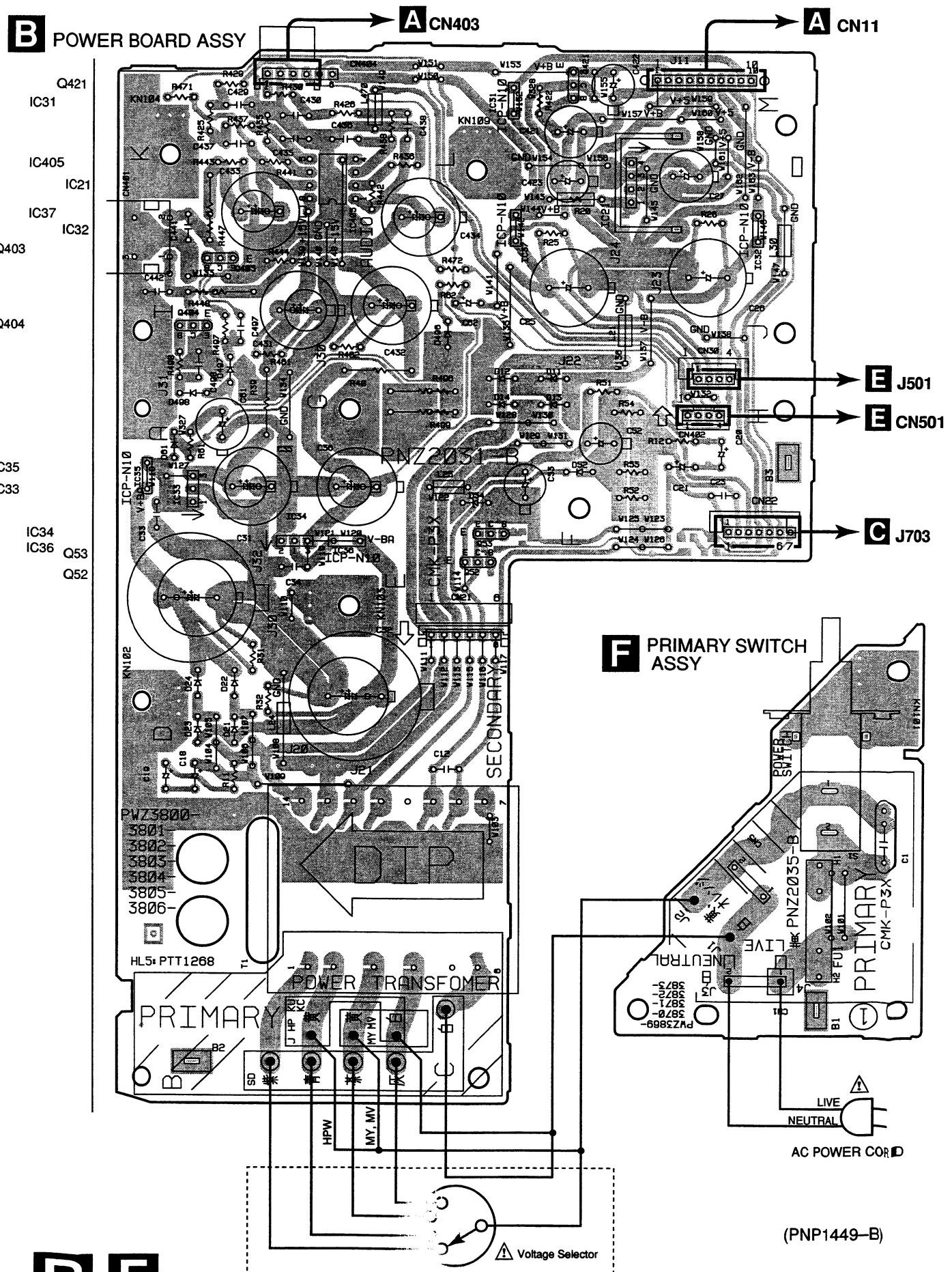
A MAIN BOARD ASSY

SIDE B



4.3 POWER BOARD and PRIMARY SWITCH ASSEMBLIES

SIDE A



22

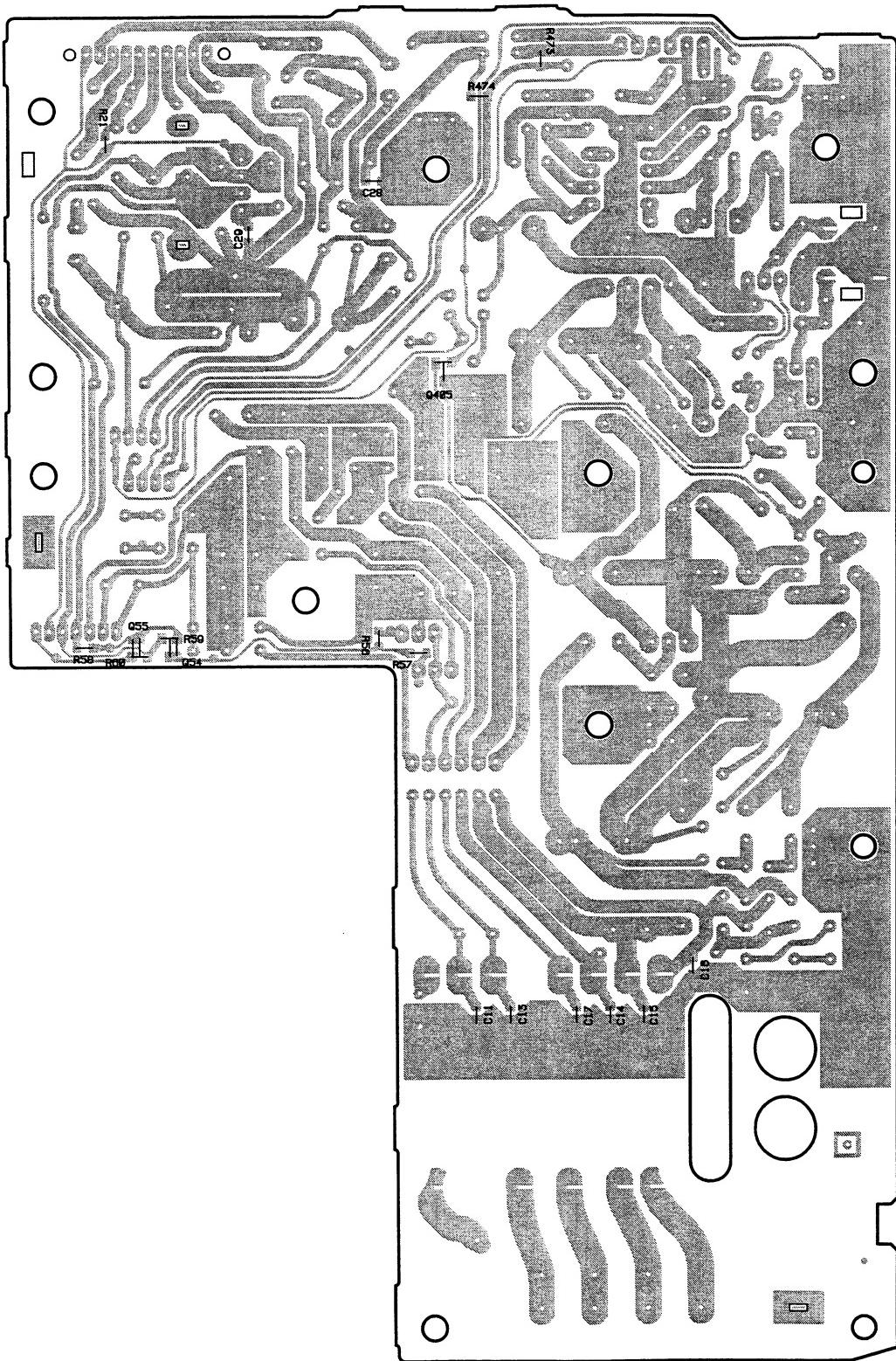
B F

2

1

6

SIDE B

B POWER BOARD ASSY

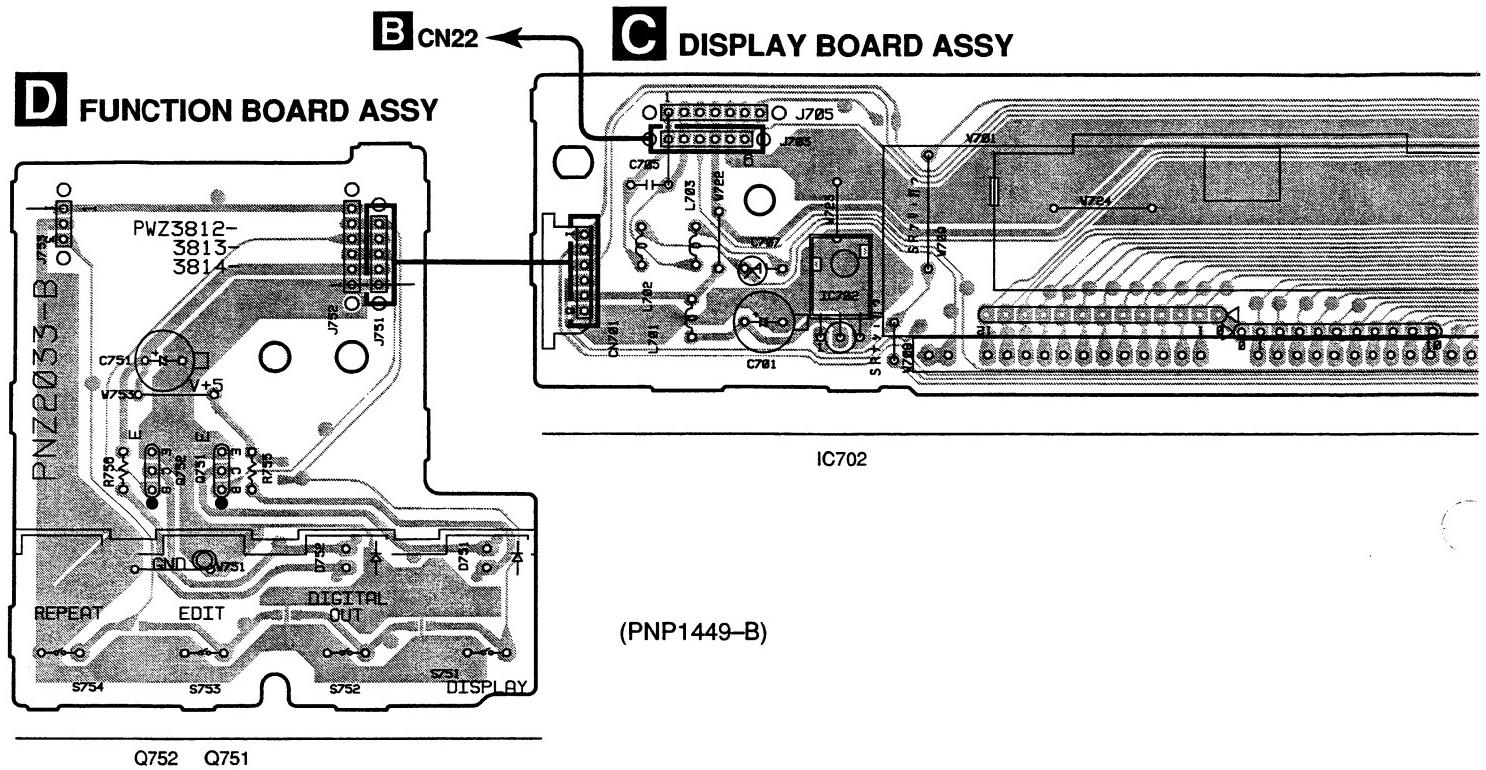
Q405

Q54
Q55

(PNP1449-B)

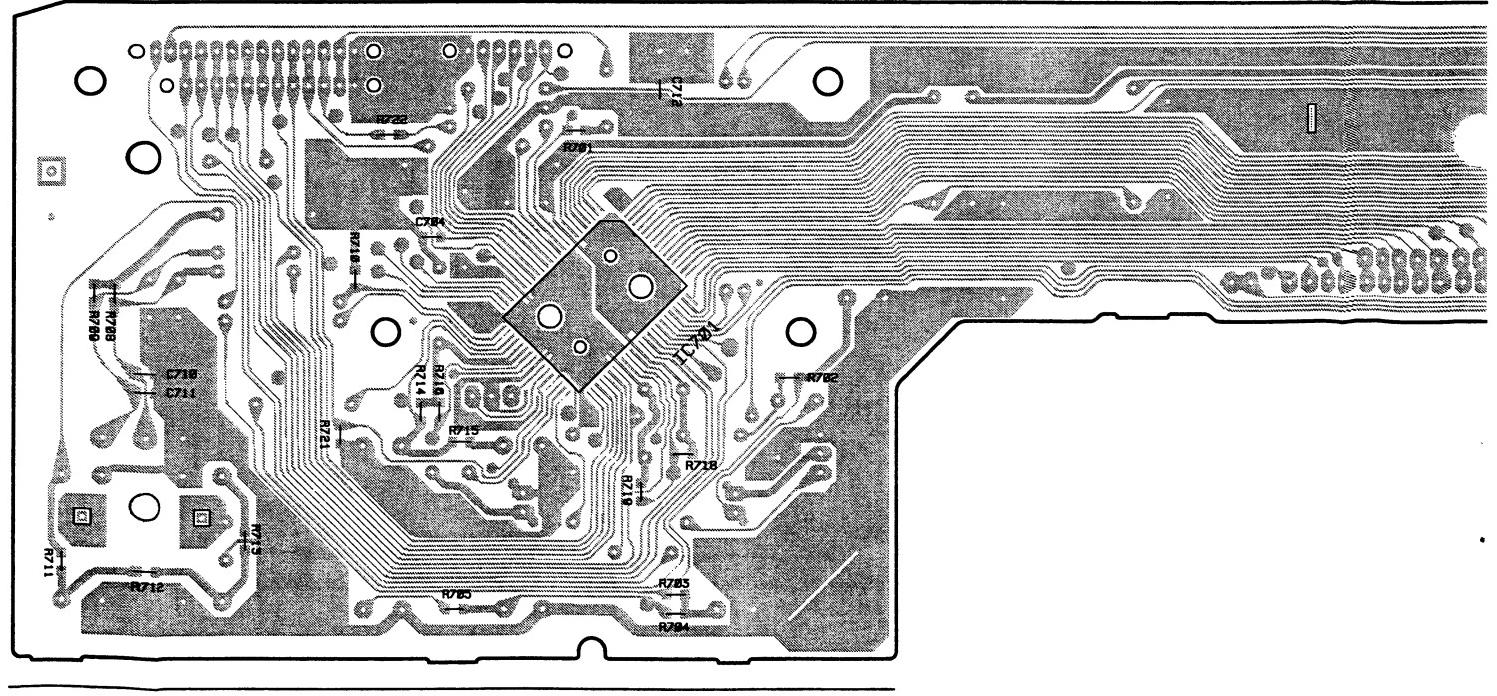
4.4 DISPLAY BOARD and FUNCTION BOARD ASSEMBLIES

SIDE A



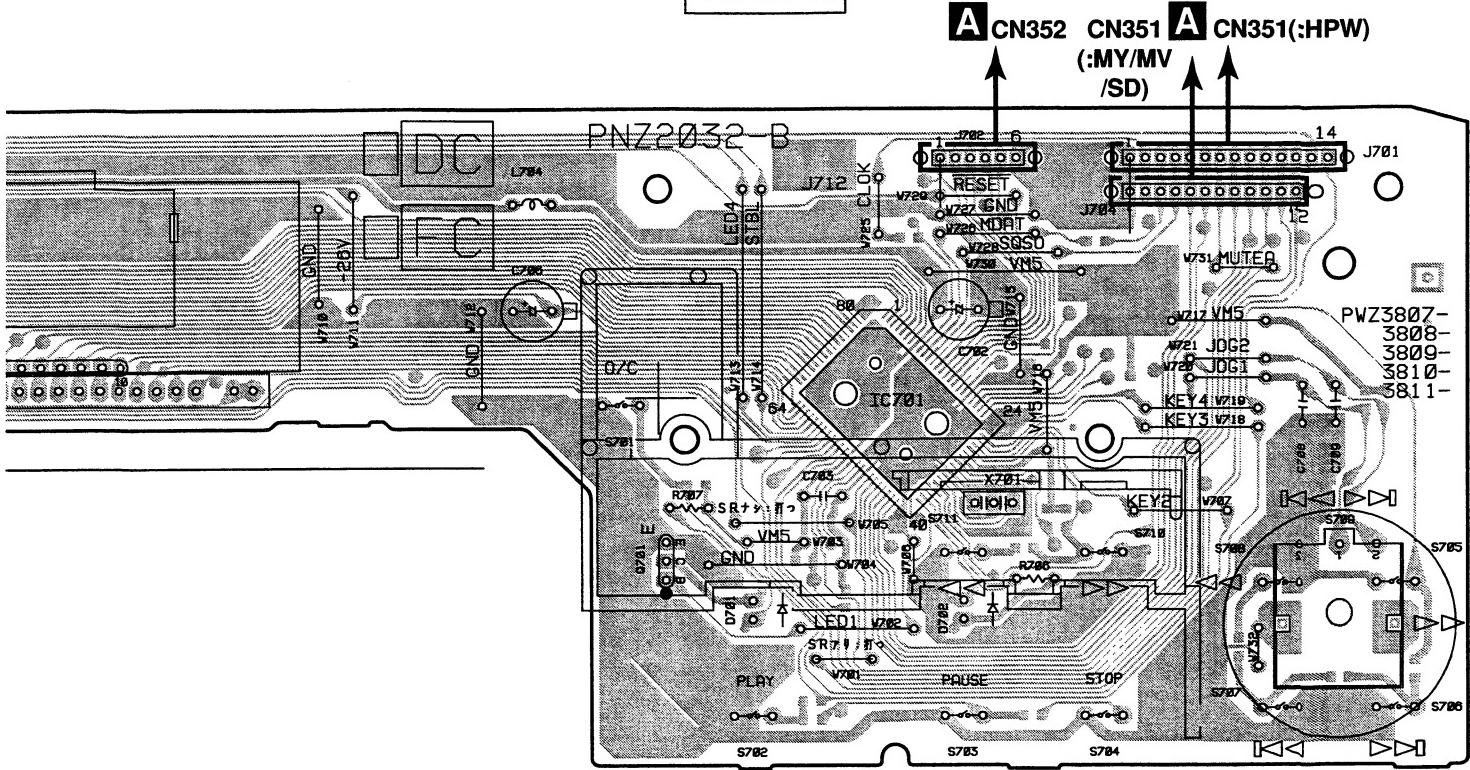
SIDE B

C DISPLAY BOARD ASSY



IC701

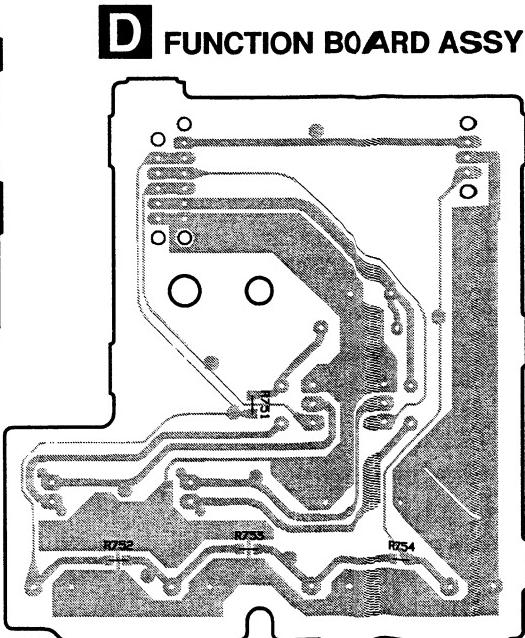
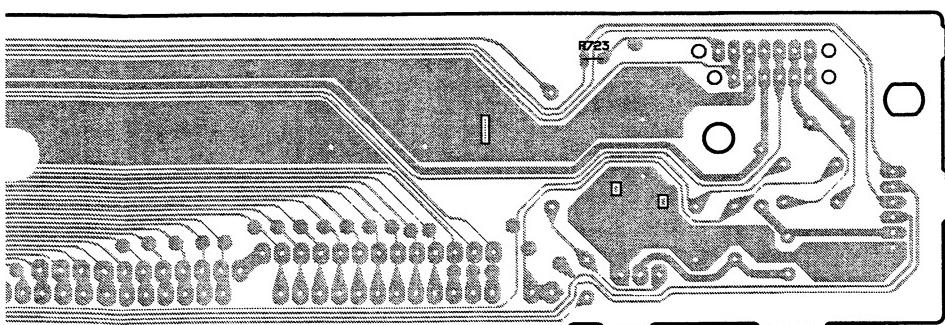
SIDE A



Q701

(PNP1449-B)

SIDE B



P NP1449-B)

CD

5. PCB PARTS LIST

NOTES : • Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.

• The Δ mark found on some component parts indicates the importance of the safety factor of the part.

Therefore, when replacing, be sure to use parts of identical designation.

• When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by $J = 5\%$, and $K = 10\%$).

$560 \Omega \rightarrow 56 \times 10^1 \rightarrow 561$ RD1/4PU [5] [6] [1] J

$47k \Omega \rightarrow 47 \times 10^3 \rightarrow 473$ RD1/4PU [4] [7] [3] J

$0.5 \Omega \rightarrow R50$ RN2H [R] [5] [0] K

$1 \Omega \rightarrow 1R0$ RSIP [1] [R] [0] K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k \Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ RN1/4PC [5] [6] [2] [1] F

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.				Remarks
		MY	MV	SD	HPW	
NSP	MOTHER BOARD ASSY	PWM2245	PWM2246	PWM2247	PWM2248	
	MAIN BOARD ASSY	PWZ3793	PWZ3794	PWZ3795	PWZ3796	
	POWER BOARD ASSY	PWZ3800	PWZ3801	PWZ3802	PWZ3803	* 1
	DISPLAY BOARD ASSY	PWZ3807	PWZ3807	PWZ3807	PWZ3808	
	FUNCTION BOARD ASSY	PWZ3812	PWZ3812	PWZ3812	PWZ3812	
	PHONE BOARD ASSY	PWZ3815	PWZ3815	PWZ3816	PWZ3816	
	PRIMARY SWITCH ASSY	PWZ3869	PWZ3869	PWZ3870	PWZ3869	* 2
NSP	MECHANISM ASSY TT96	PXA1611	PXA1611	PXA1611	PXA1611	
NSP	SERVO MECHA BOARD ASSY T96	PXA1606	PXA1606	PXA1606	PXA1606	
	MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	PWX1192	

* 1 Although PWZ3800 and PWZ3801 are different in part number, they consist of the same components.

* 2 Although PWZ3815 and PWZ3816 are different in part number, they consist of the same components.

■ CONTRAST OF PCB ASSEMBLIES

POWER BOARD Assy

PWZ3800, PWZ3802 and PWZ3803 are constructed the same except for the following:

Mark	Symbol and Description	Part No.			Remarks
		PWZ3800	PWZ3802	PWZ3803	
	C18, C19	CEGA4R7RM50	CEBA2R2M50	CEBA2R2M50	
	C421 (1000 μ F / 16V)	PCH1122	Not used	Not used	
	C422 (220 μ F / 25V)	PCH1128	Not used	Not used	
	R11	RDR1/2PM8R2J	RD1/4PU8R2J	RD1/4PU8R2J	
NSP	J30 JUMPER	PDF1177	Not used	Not used	
NSP	J06 JUMPER	Not used	PDF1099	Not used	
NSP	J07 JUMPER	Not used	PDF1100	Not used	
NSP	J08 JUMPER	Not used	PDF1101	Not used	
NSP	J09 JUMPER	Not used	PDF1102	Not used	

DISPLAY BOARD Assy

PWZ3807 and PWZ3808 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3807	PWZ3808	
	J701 JUMPER	Not used	D20PDY1425G	
	J704 JUMPER	D20PDY1225G	Not used	
	Cable holder	51048-1200	Not used	
NSP	Cable holder	Not used	51048-1400	

MAIN BOARD Assy

PWZ3793, PWZ3794, PWZ3795 and PWZ3796 are constructed the same except for the following:

Mark	Symbol and Description	Part No.				Remarks
		PWZ3793	PWZ3794	PWZ3795	PWZ3796	
	IC331 Q323 D391, D394 D392 L332	Not used DTC124EK Not used Not used Not used	TC74HC00AF Not used Not used Not used LFA151J	Not used DTC124EK Not used Not used Not used	Not used DTC124EK 1SS254 DAP202K Not used	
	L334 L335 L391, L392 C323 C330	Not used Not used Not used CKSQYB103K50 Not used	PTL1003 PTL1017 Not used CKSQYB103K50	Not used Not used Not used Not used	Not used Not used LAU1R0J CKSQYB103K50	
	C331, C339 C169 C175, C303, C406, C413, C414 C301 C302	Not used CEGA4R7M50 PCH1128 CEGA470M25 CFTLA394J50	CKSQYB473K50 CEGA4R7M50 PCH1128 CEGA470M25 CFTLA394J50	Not used PCH1127 Not used Not used Not used	Not used PCH1127 Not used Not used Not used	
	C332 C333 C334, C336 C335 C337	Not used Not used Not used Not used Not used	CCSQCH101J50 PCH1128 CKSQYB104K25 CEAT470M50 CCSQCH470J50	Not used Not used Not used Not used Not used	Not used Not used Not used Not used Not used	
	C341 C393 R320 R322, R334 R333	PCH1122 Not used RS1/10S0R0J Not used Not used	PCH1122 Not used Not used RS1/10S102J RS1/10S750J	PCH1128 Not used RS1/10S0R0J Not used Not used	PCH1128 CCSQCH101J50 RS1/10S0R0J Not used Not used	
	R339 R391 R392 JA331 JA391, JA392 CN351 KN105	Not used Not used Not used Not used Not used 52147-1210 Not used	RS1/10S331J Not used Not used PKB1028 Not used 52147-1210 Not used	Not used Not used Not used Not used Not used 52147-1210 Not used	Not used RS1/10S244J RS1/10S102J Not used RKN1004 52147-1410 VNF1084	

PRIMARY SWITCH Assy

PWZ3869 and PWZ3870 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3869	PWZ3870	
	J02	PDF1178	PDF1181	

■ PARTS LIST FOR PD-S707/MY

Mark	No.	Description	Parts No.
MOTHER BOARD ASSY			
OTHERS			
	PC Board (MOTHER)		PNP1449
A MAIN BOARD ASSY			
SEMICONDUCTORS			
▲	IC151	CXA1782CQ	
▲	IC301	CXD2507AQ	
▲	IC232	ICP-N10	
▲	IC201	LA6517	
▲	IC202	LA6520	
▲	IC302	NJM4565M	
▲	IC311, IC421	NJM7805FA	
	IC341	PD0236AD	
	IC401	PE8001A	
	IC303	TC74AC00F	
	Q151	2SA854S	
	Q391	2SC1740S	
	Q152, Q452	DTA124EK	
	Q323, Q451	DTC124EK	
	D397	1SS254	
	D326	DA204K	
	D395	DAP202K	
	D218	UDZS6.8B	
COILS AND FILTERS			
	L395, L396 (AXIAL INDUCTOR)	LAU1R0J	
	L312 (Noise filter)	RTF1167	
CAPACITORS			
	C181	CCSQCH100D50	
	C313	CCSQCH120J50	
	C314	CCSQCH220J50	
	C405	CEGA101M50	
	C301, C312, C427, C428	CEGA470M25	
	C169, C415, C416	CEGA4R7M50	
	C302	CFTLA394J50	
	C133, C309	CFTLA474J50	
	C163, C462	CKSQYB102K50	
	C156, C159, C161, C164, C168	CKSQYB103K50	
	C191, C192, C205, C210, C215	CKSQYB103K50	
	C219, C308, C317, C323, C344	CKSQYB103K50	
	C351, C399	CKSQYB103K50	
	C153- C155, C158, C193, C304	CKSQYB104K25	
	C319, C321, C342, C408, C409	CKSQYB104K25	
	C411, C412, C461	CKSQYB104K25	
	C176, C218, C306	CKSQYB152K50	
	C221, C222	CKSQYB182K50	
	C315	CKSQYB221K50	
	C162	CKSQYB332K50	
	C160	CKSQYB333K50	
	C167	CKSQYB472K50	
	C152, C307	CKSQYB473K50	
	C151	CKSQYB682K50	
	C157	CKSQYB823K25	
	C311, C341, C407, C79 (1000μF/16V)	PCH1122	
	C171 (100μF/50V)	PCH1126	
	C170 (4.7μF/50V)	PCH1127	
	C131, C175, C211, C212 (220μF/25V)	PCH1128	
	C216, C217, C303, C322, C406	PCH1128	

Mark	No.	Description	Parts No.
	C413, C414 (220μF/25V)		PCH1128
RESISTORS			
▲	R427, R428		RD1/4PU273J
▲	R163, R164		RD1/4PU470J
▲	R420		RFA1/4PL8R2J
	VR153, VR155 (10KΩ- B)		VCP1156
	VR151, VR152, VR154 (22KΩ- B)		VCP1158
	VR156 (220KΩ- B)		VCP1164
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN202	MT 4P CONNECTOR	173981-4
	CN204	MT 5P CONNECTOR	173981-5
	CN352	6P JUMPER CONNECTOR	52147-0610
	CN11	10P JUMPER CONNECTOR	52147-1010
	CN351	12P JUMPER CONNECTOR	52147-1210
	JA321	OPTICAL LINK OUT	GP1F32T
	CN403	SOCKET 4P	KM250NA4L
	JA393	JACK	PKN1005
	X301	XTAL RES (16.9344 MHz)	PSS1008
	CN201	CONNECTOR 6P	RKP-533
	CN131	CONNECTOR PCB BINDER	SLW16S-1C7
			VEF1040
			KN106, KN107 EARTH METAL FITTING VNF1084
B POWER BOARD ASSY			
SEMICONDUCTORS			
▲	IC31	ICP-N10	
▲	IC405	NJM4558DX	
▲	IC21	PQ05RR12	
	Q403, Q404	2SC3068	
	Q405	DTC124EK	
	D496- D498	1SS254	
▲	D54	MTZJ18B	
▲	D11- D14, D21- D24, D52	S5688G	
COILS AND FILTERS			
	L21, L30 (FERRITE BEADS)		PTH1014
	L470 (FERRITE BEADS)		PTH1016
CAPACITORS			
	C62	CEAT2R2M150	
	C433, C434	CEGA101M150	
	C18, C19	CEGA4R7M50	
	C53	CFTLA334J50	
	C11, C13- C17	CKSQYB103K50	
	C28	CKSQYB104K25	
	C441, C442	CQMBA102J50	
	C497, C498	CQMBA103J50	
	C429, C430, C435- C438	CQMBA152J50	
	C25, C26 (4700 μF/16V)	PCH1119	
	C27, C421, C431, C432 (1000 μF/16V)	PCH1122	
	C31, C32 (3300 μF/25V)	PCH1125	
	C52 (100 μF/50V)	PCH1126	
	C422 (220 μF/25V)	PCH1128	

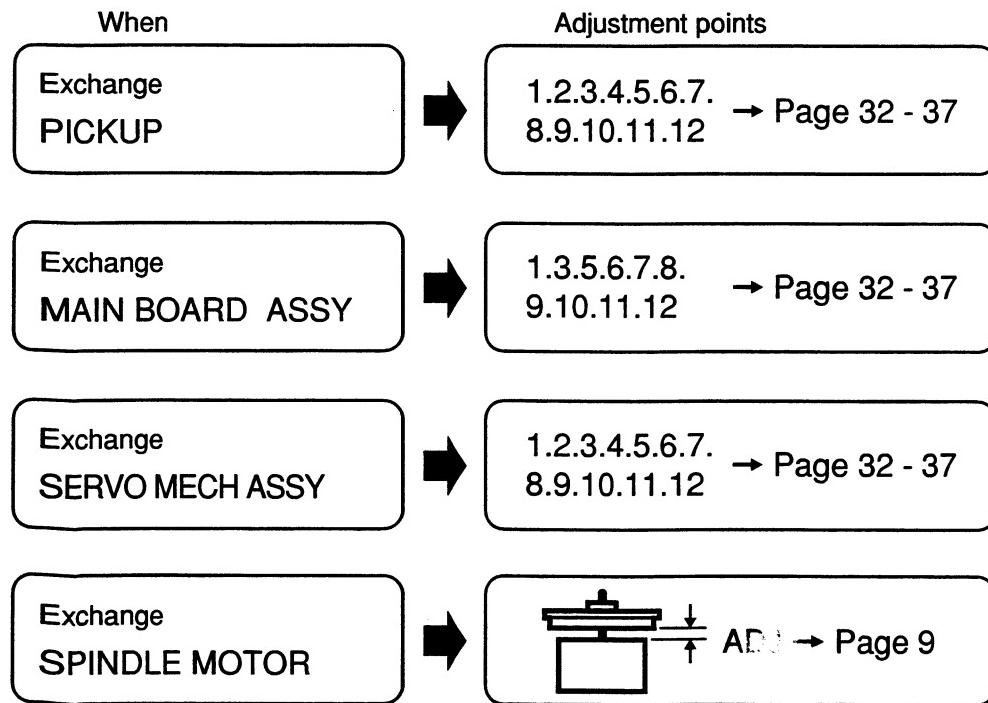
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
RESISTORS							
	R39, R40		RDR1/2PM101J		S751-S754		VSG1009
	R496, R499		RDR1/2PM302J				
	R447, R448		RDR1/2PM471J				
⚠	R11		RDR1/2PM8R2J				
	R20		RFA1/4PL8R2J				
	R21		RS1/10S103J				
	Other Resistors		RD1/4PU□□□J				
OTHERS							
CN30	4P JUMPER CONNECTOR	52147-0410		J751	5P CABLE HOLDER	51048-0500	
CN22	6P JUMPER CONNECTOR	52147-0610			5P JUMPER WIRE	D20PDY0510E	
CN401	2P PIN JACK	AKB7032					
CN402	4P TOP POST	B4B-PH-K-S					
J11	WIRE ASSY 10P	D20PDY1006G					
CN404	PLUG 4P	KP250NA4L					
J30	LEAD WIRE	PDF1177					
KN102	EARTH METAL FITTING	VNF1084					
	10P CABLE HOLDER	51048-1000					
C DISPLAY BOARD ASSY							
SEMICONDUCTORS							
IC701		PD4999A					
COILS AND FILTERS							
L702-L704		LFA1R0J					
SWITCHES							
S709		ASX7008					
S701-S704, S710, S711		VSG1009					
CAPACITORS							
C701		CEAL470M16					
C702		CEAT221M16					
C706		CFTLA274J50					
C705		CFTLA334J50					
C704		CKSQYB103K25					
C710, C711		CKSQYB471K50					
C712		CKSQYB473K50					
RESISTORS							
All Resistors		RS1/10S□□□J					
OTHERS							
	6P CABLE HOLDER	51048-0600					
	12P CABLE HOLDER	51048-1200					
J702	WIRE ASSY 6P	D20PDY0620B					
J703	WIRE ASSY 6P	D20PDY0640G					
J704	WIRE ASSY 12P	D20PDY1225G					
V701	REMOTE RECEIVER UNIT	GP1U27X					
X701	FL INDICATOR TUBE	PEL1094					
	CERAMIC RESONA(4.19 MHz)	VSS1028					
D FUNCTION BOARD ASSY							
SEMICONDUCTORS							
Q751, Q752		DTC124ES					
D752	LED (ORANGE)	SLP6118C51H					
D751	LED (RED)	SLP9118C51H					
E PHONE BOARD ASSY							
SEMICONDUCTORS							
IC501		IC501					
		Q501, Q502					
OTHERS							
J751	5P CABLE HOLDER	51048-0500					
	5P JUMPER WIRE	D20PDY0510E					
F MECHANISM BOARD ASSY							
SWITCHES							
S610		DSG1016					
OTHERS							
CN610	MT CONNECTOR 4P	173979-4					
F PRIMARY SWITCH ASSY							
CAPACITOR							
⚠ C1	CKA (10000pF / AC250V)	ACG7020					
OTHERS							
J1	LEAD WIRE	PDF1177					
J2	LEAD WIRE	PDF1178					
	CAPACITOR COVER	REC-150					
⚠ S1	TERMINAL	RKC-061					
	PRIMARY SWITCH	RSA1001					

6. ADJUSTMENT

6.1 PREPARATIONS

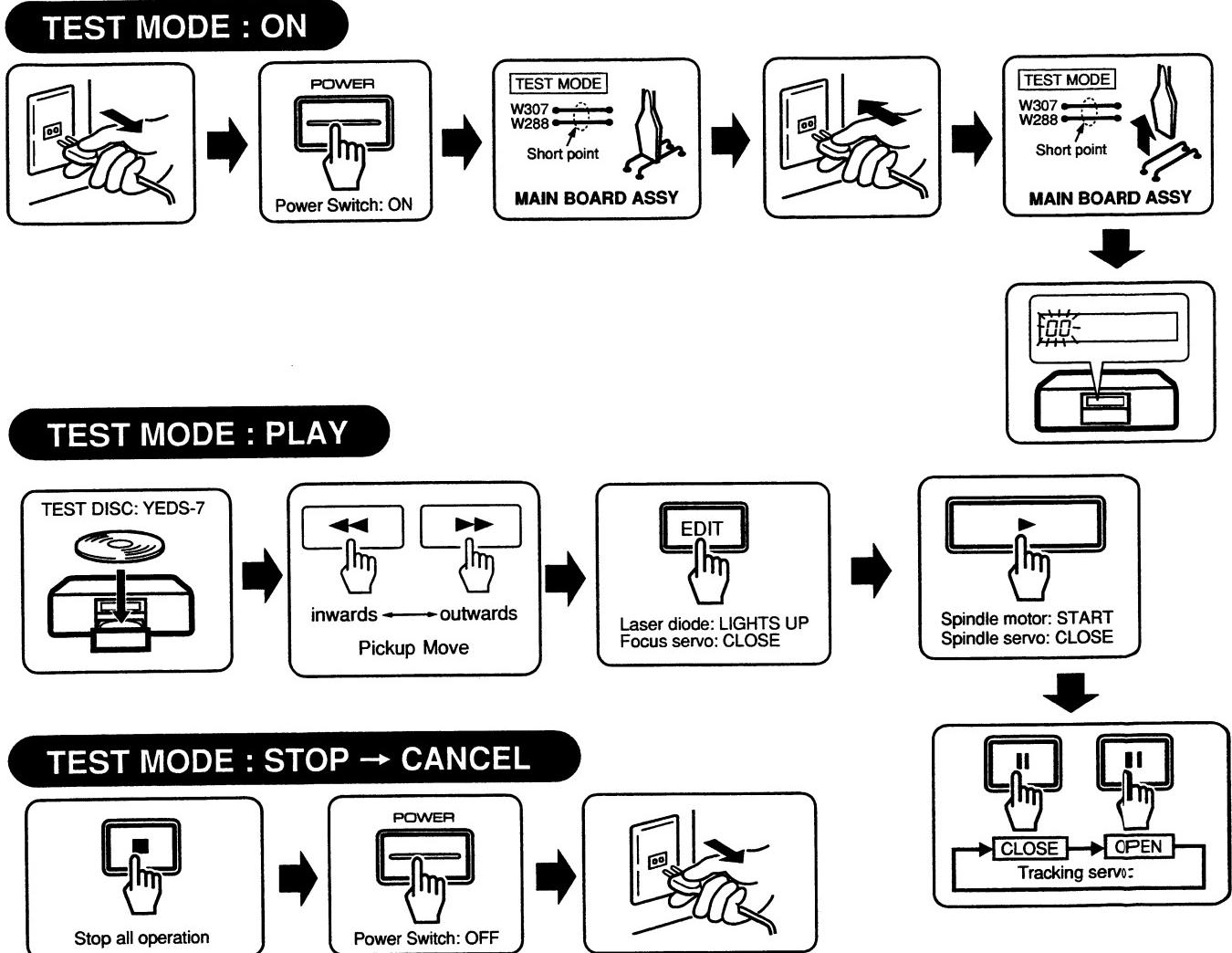
6.1.1 Jigs and Measuring Instruments

6.1.2 Necessary Adjustment Points



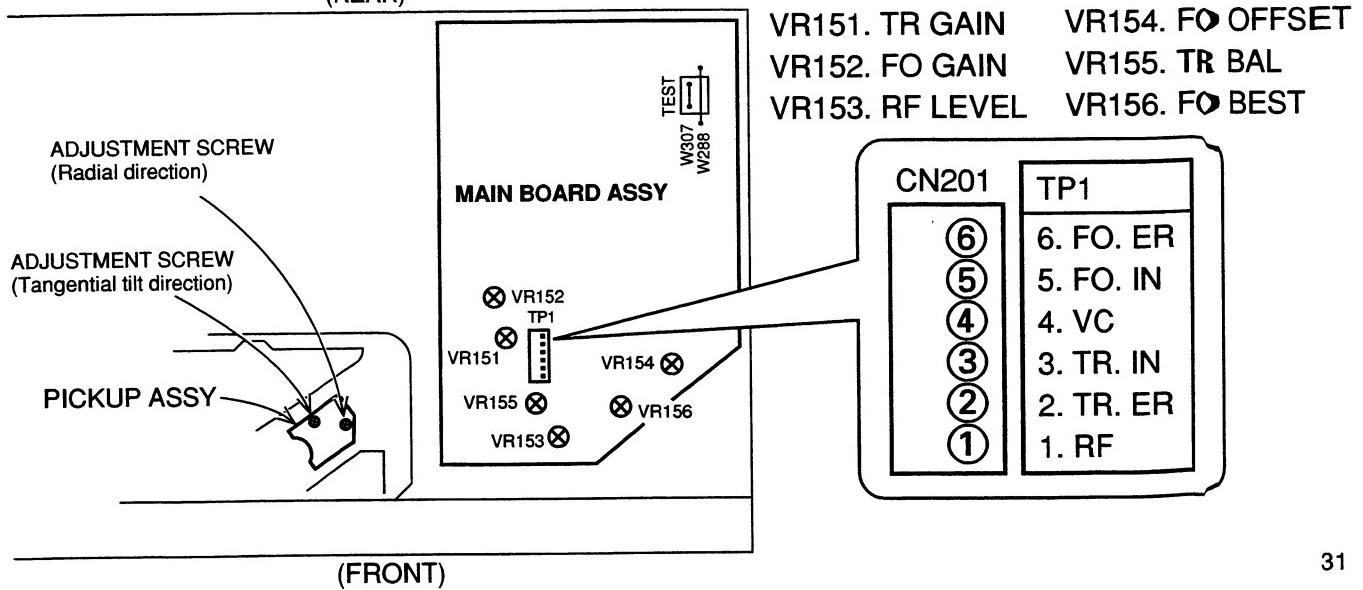
6.2 ADJUSTMENT

6.2.1 How to Start/Cancel Test Mode



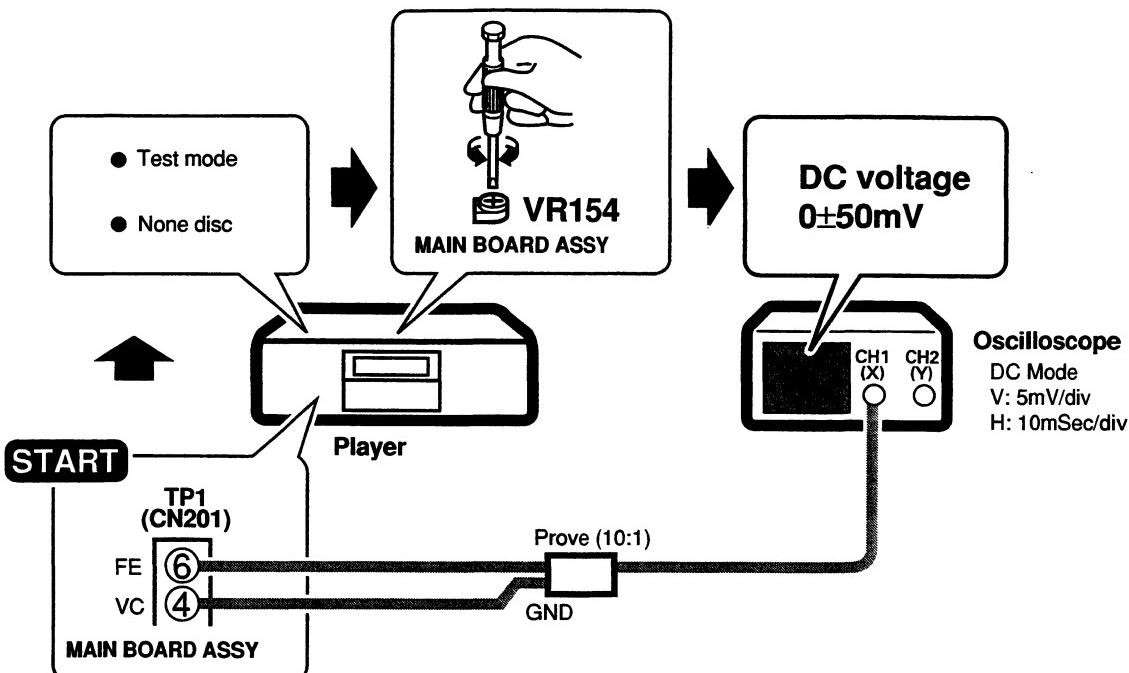
6.2.2 Adjustment Location

(REAR)

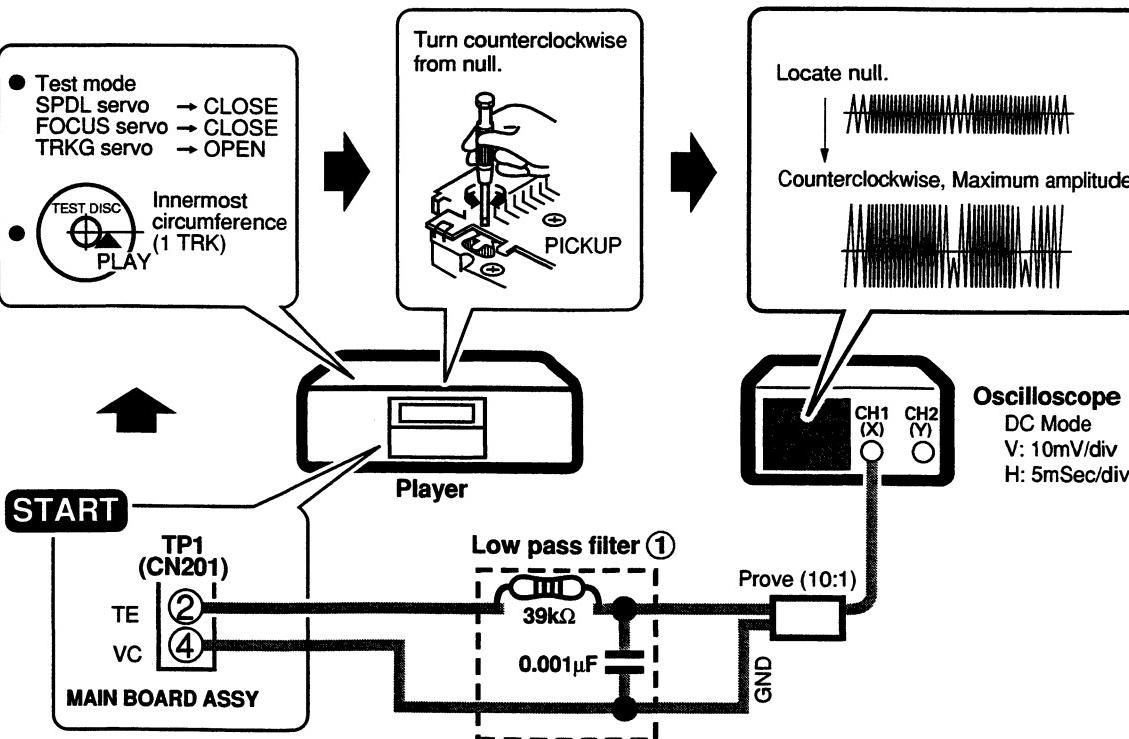


6.2.3 Check and Adjustment

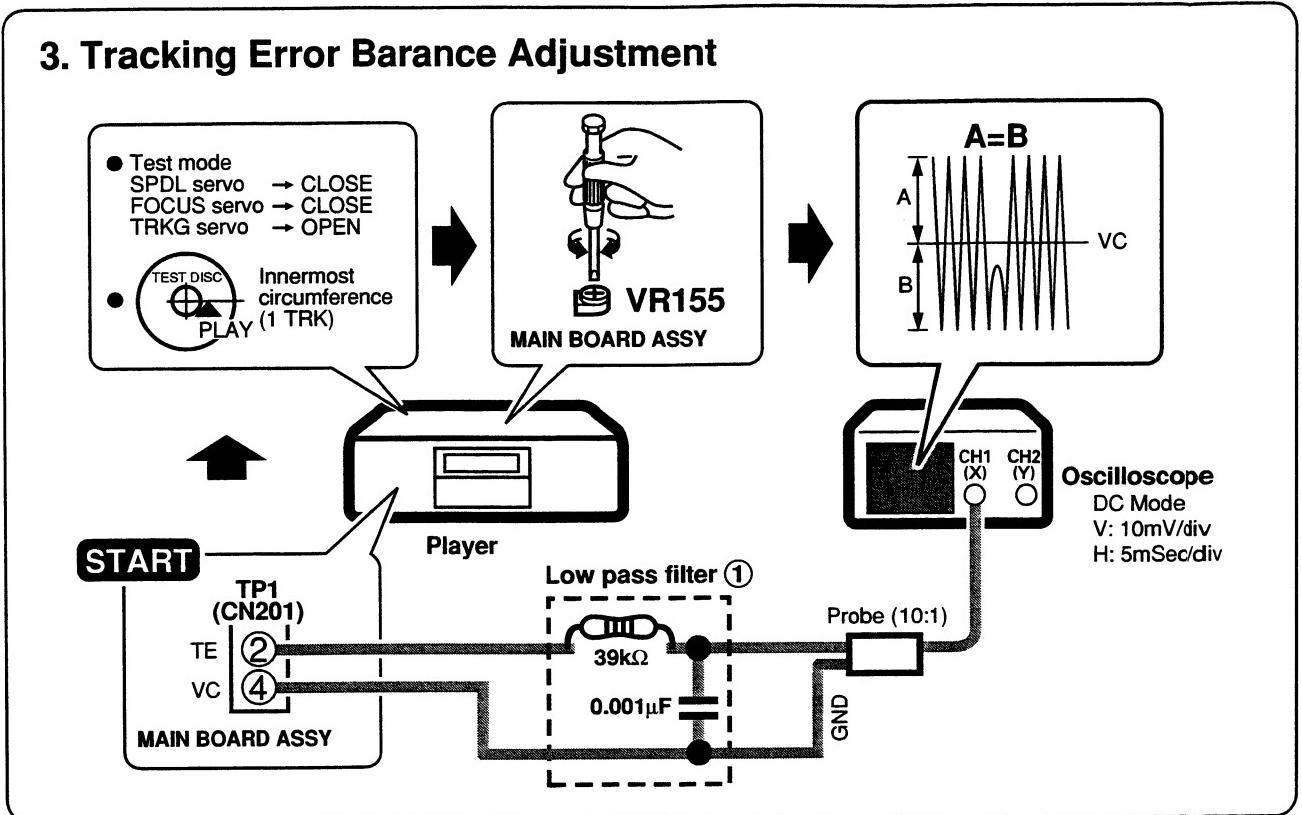
1. Focus Offset Adjustment



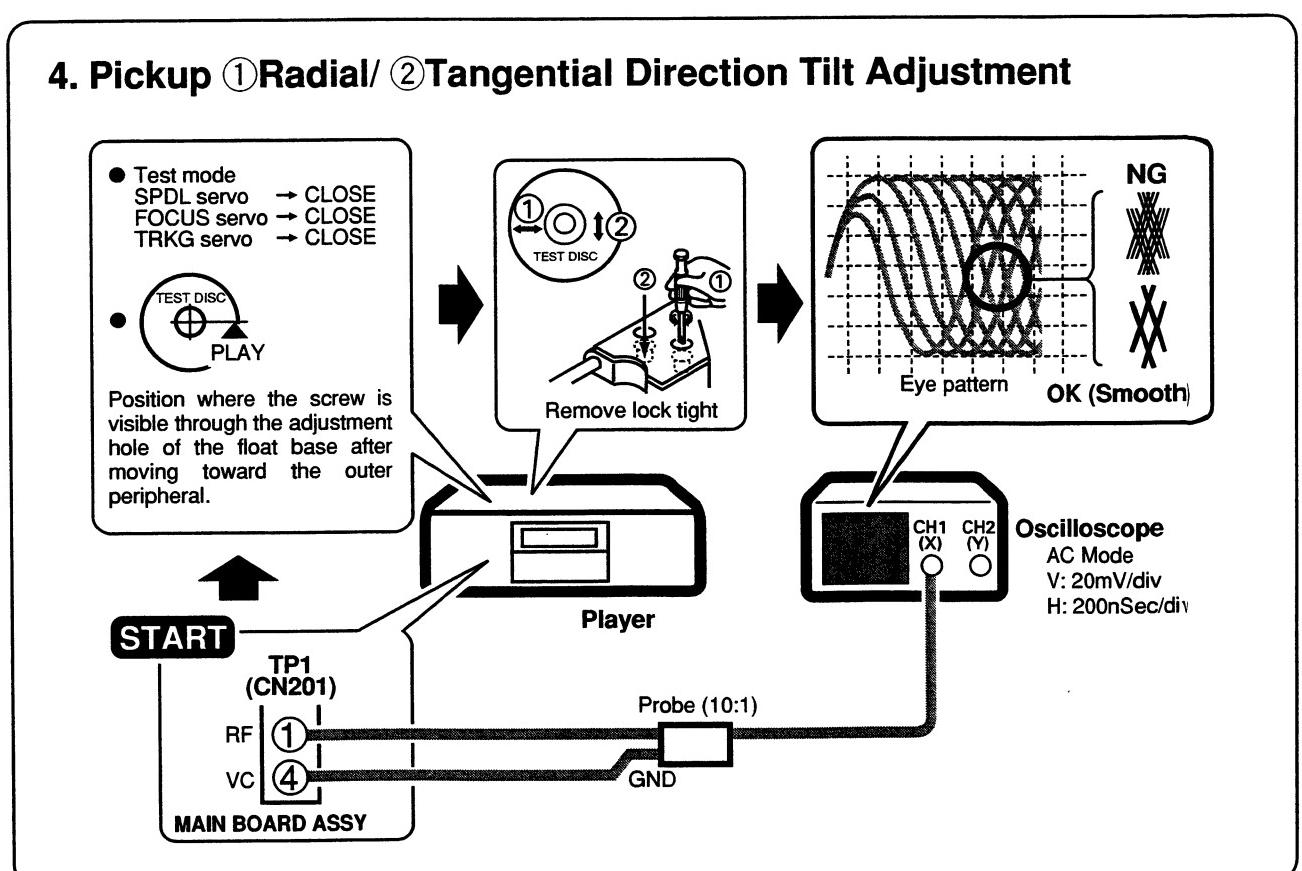
2. Grating Adjustment



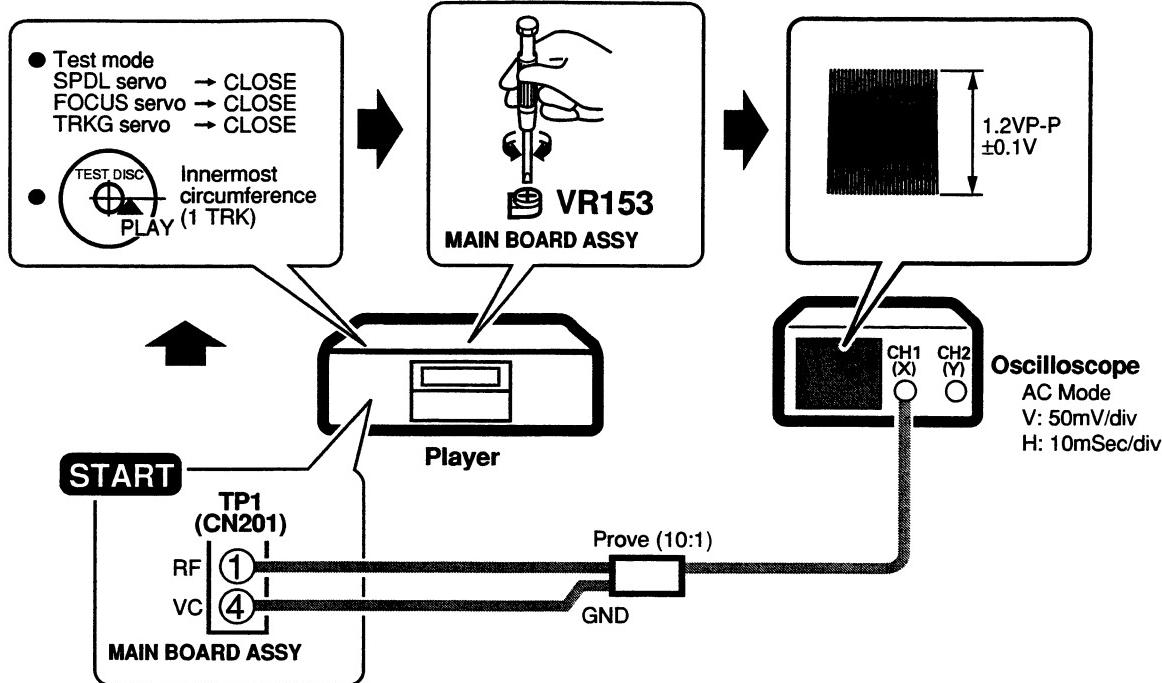
3. Tracking Error Barance Adjustment



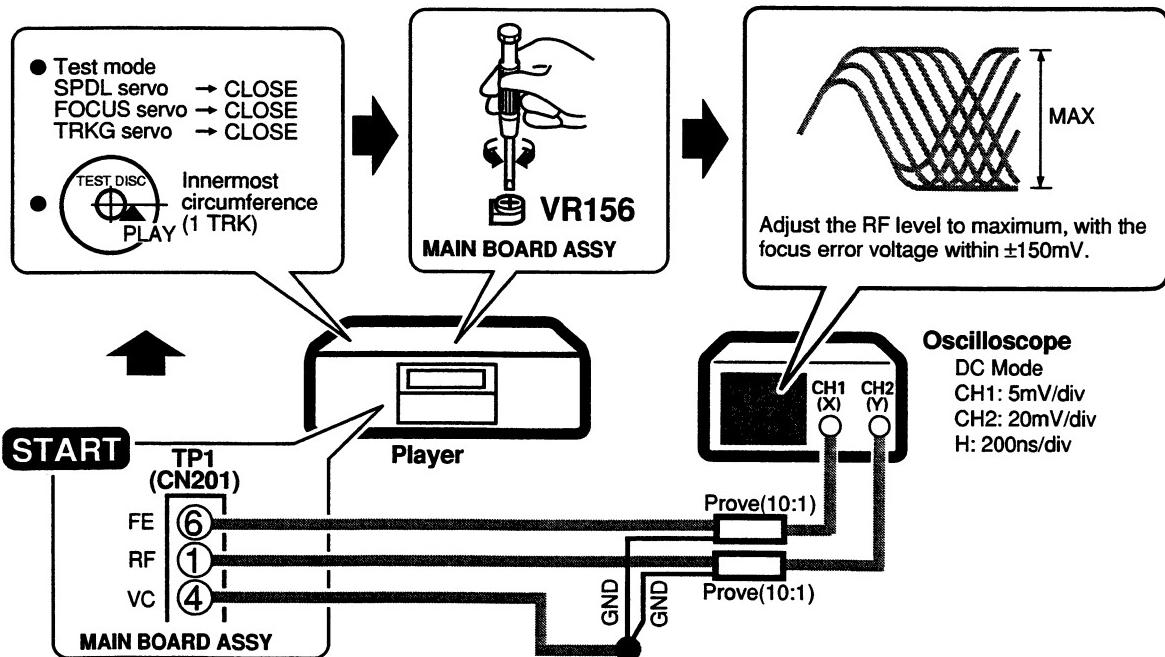
4. Pickup ①Radial/ ②Tangential Direction Tilt Adjustment



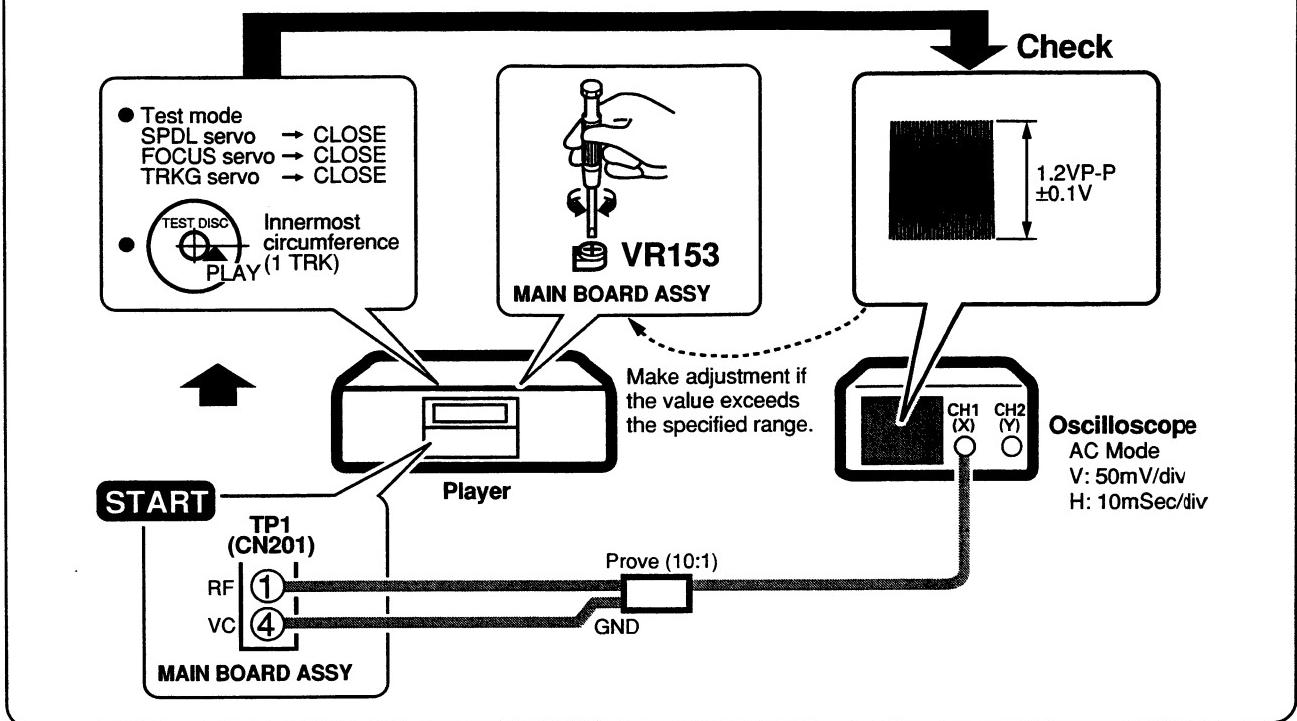
5. RF Level Adjustment I



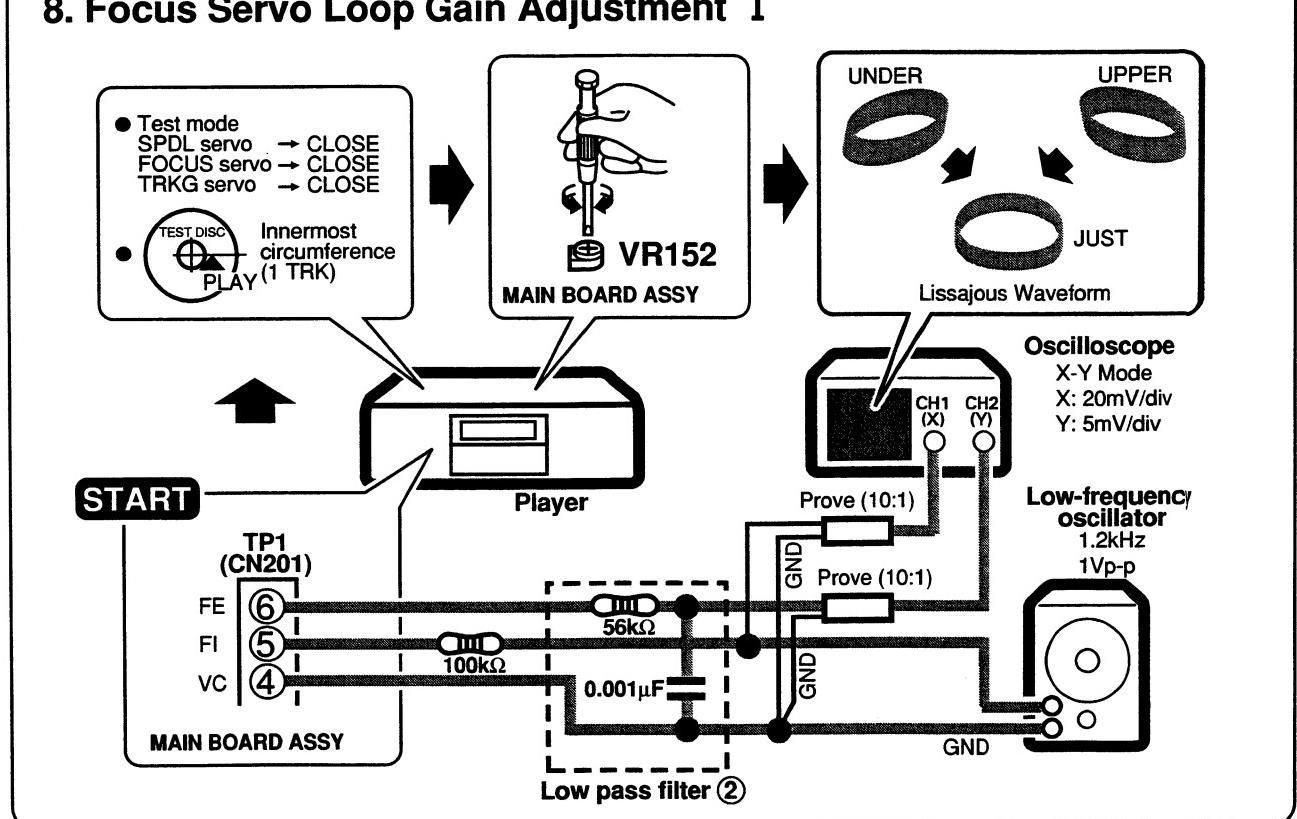
6. Focus Best Adjustment I



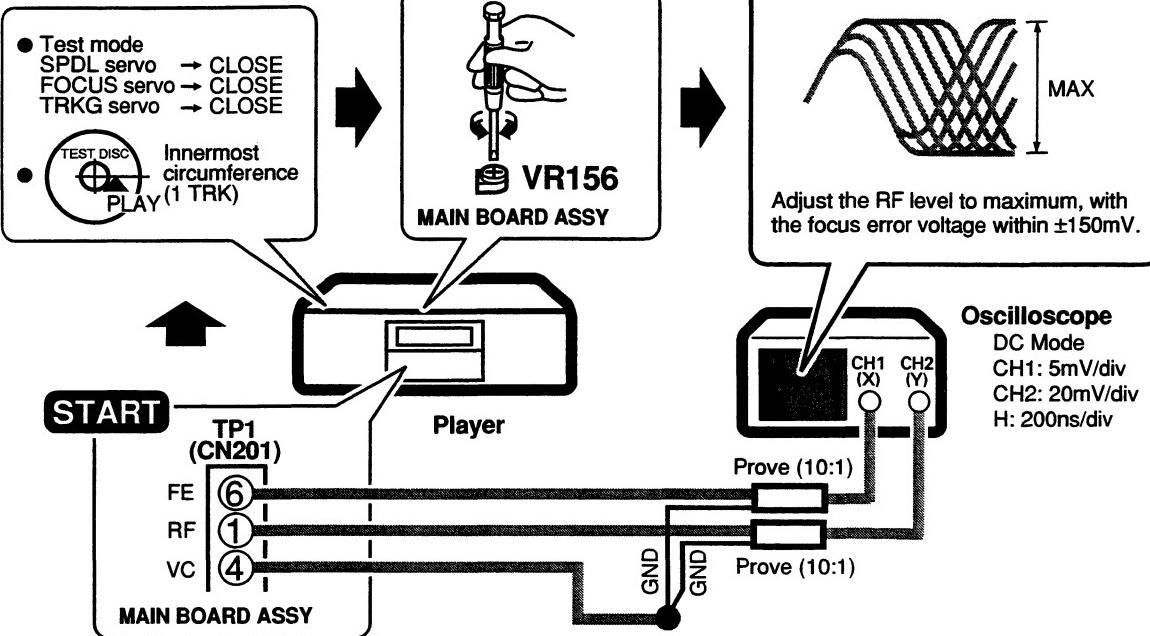
7. RF Level Adjustment II



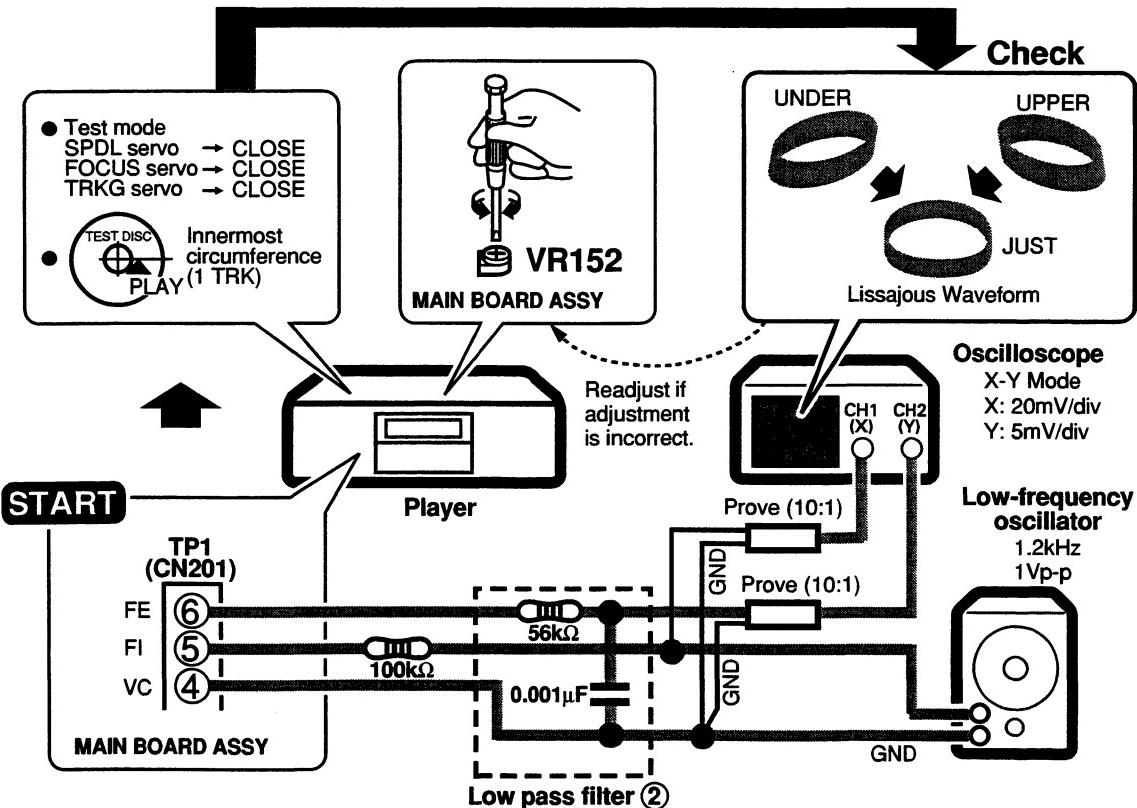
8. Focus Servo Loop Gain Adjustment I



9. Focus Best Adjustment II

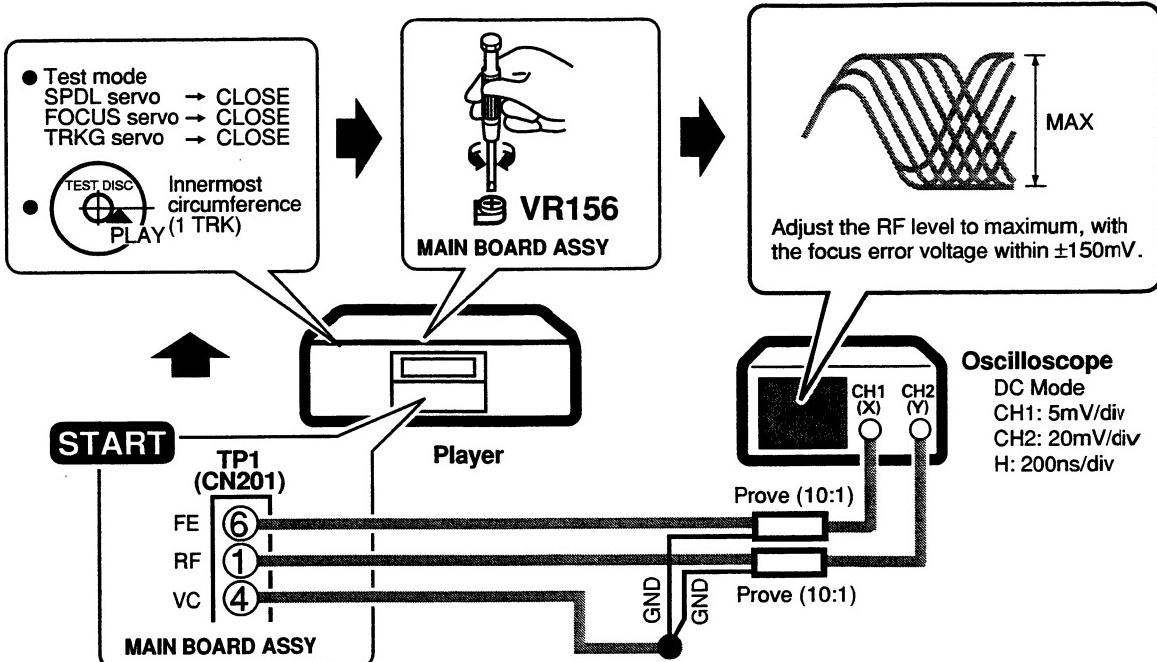


10. Focus Servo Loop Gain Adjustment II

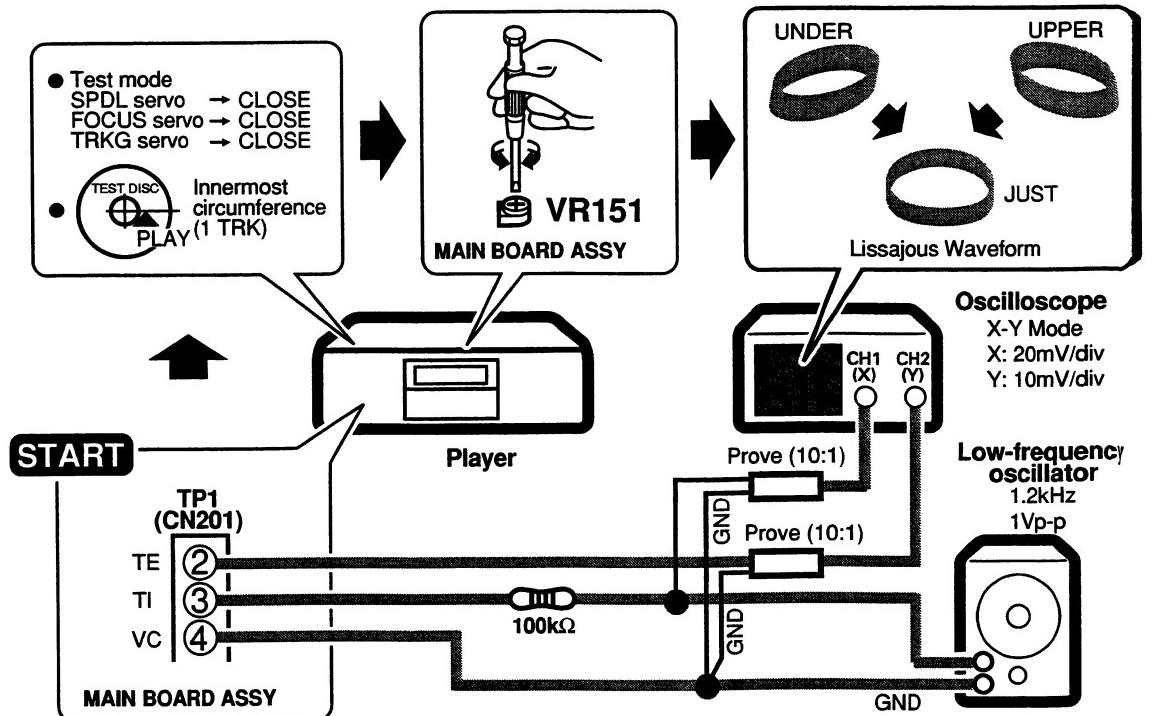


11. Focus Best Adjustment III

Adjust this point only if adjustment was made in item 10.



12. Tracking Servo Loop Gain Adjustment



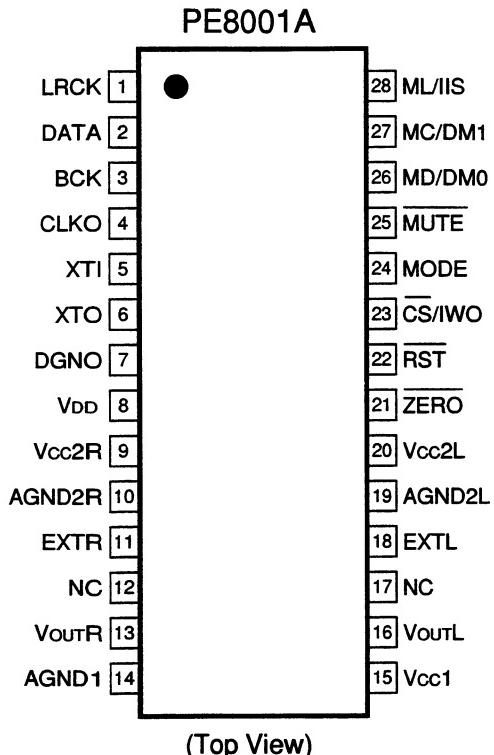
7. GENERAL INFORMATION

7.1 IC

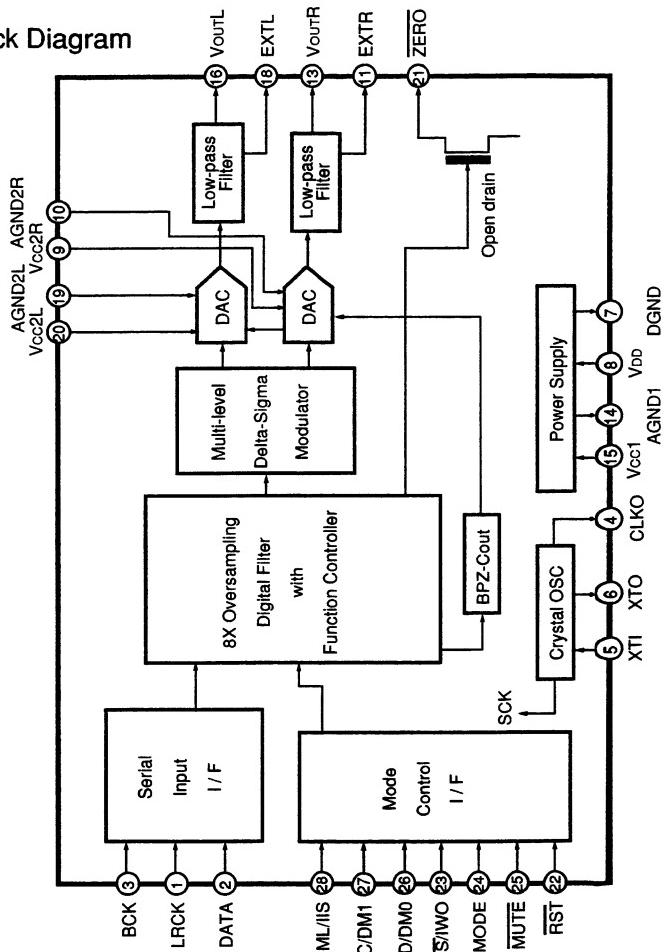
■ PE8001A (IC401: MAIN BOARD ASSY)

■ D/A CONVERTER IC

- Pin Arrangement



- Block Diagram



- Pin Function

No.	Name	I/O	Description
1	LRCK	I	LRCK Clock Input (fs)
2	DATA	I	Serial Audio Data Input
3	BCK	I	Data bit clock Input
4	CLKO	O	Buffer output of System clock.
5	XTI	I	Oscillator Input / External clock Input
6	XTO	O	Oscillator Output
7	DGND	-	Digital GND
8	VDD	-	+5V Digital Power Supply
9	Vcc2R	-	+5V Analog Power Supply
10	AGND2R	-	Analog GND
11	EXTR	O	Rch, Common Pin of Analog output Amp.
12	NC	-	Not connect
13	VoutR	O	Rch, Analog Voltage output of Audio signal
14	AGND1	-	Analog GND

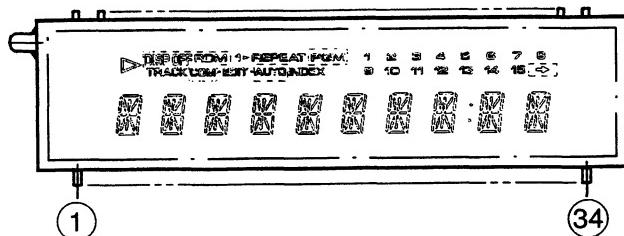
No.	Name	I/O	Description
15	Vcc1	-	+5V Analog Power Supply
16	VoutL	O	Lch, Common Pin of Analog output Amp.
17	NC	-	Not connect
18	EXTL	O	Lch, Analog Voltage output of Audio signal
19	AGND2L	-	Analog GND
20	Vcc2L	-	+5V Analog Power Supply
21	ZERO	O	Zerodata. flag
22	RST	I	Reset. "L" at reset DF and modulator
23	CS/IWO	I	Chip select / Input format. select
24	MODE	I	Mode control select (H: Software, L: Hardware)
25	MUTE	I	Mute control
26	MD/DM0	I	Mode control data / De-emphasis selection
27	MC/DM1	I	Mode control BCK / De-emphasis selection
28	ML/IIS	I	Mode control WDEK / Input format selection

7.2 DISPLAY

■ PEL1094 (V701: DISPLAY BOARD ASSY)

■ FL INDICATOR TUBE

● Pin Assignment

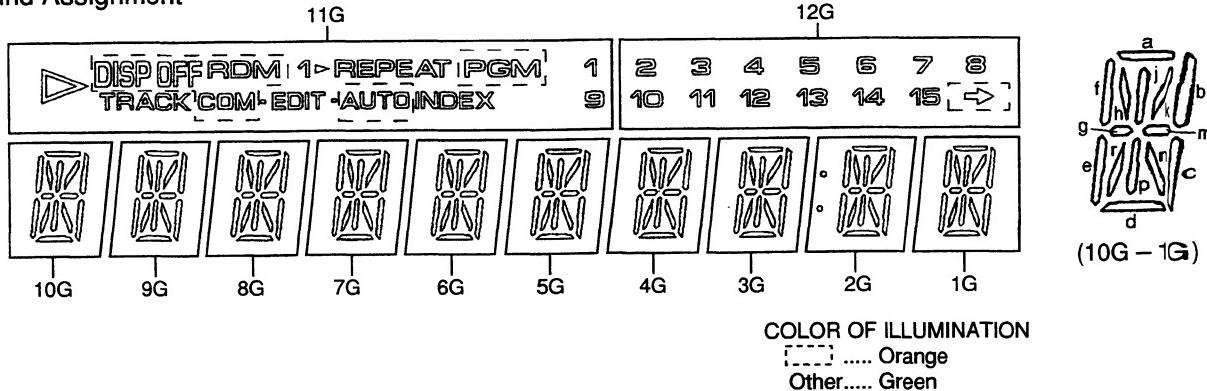


NOTE 1) F1,F2--Filament
2) NP-----No pin
3) NX-----No extend pin
4) DL-----Datum Line
5) 1G~12G--Grid

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
CONNECTION	F	F	N	1	1	1	1	9	8	7	6	5	4	3	2	1	N	N	P	P	P	P	P	P	P	P	P	P	P	P	P	N	F	F
	1	1	P	G	G	G	G	G	G	G	G	G	G	G	G	X	X	1	2	3	4	5	6	7	8	9	0	1	2	3	4	P	2	2

● Grid Assignment

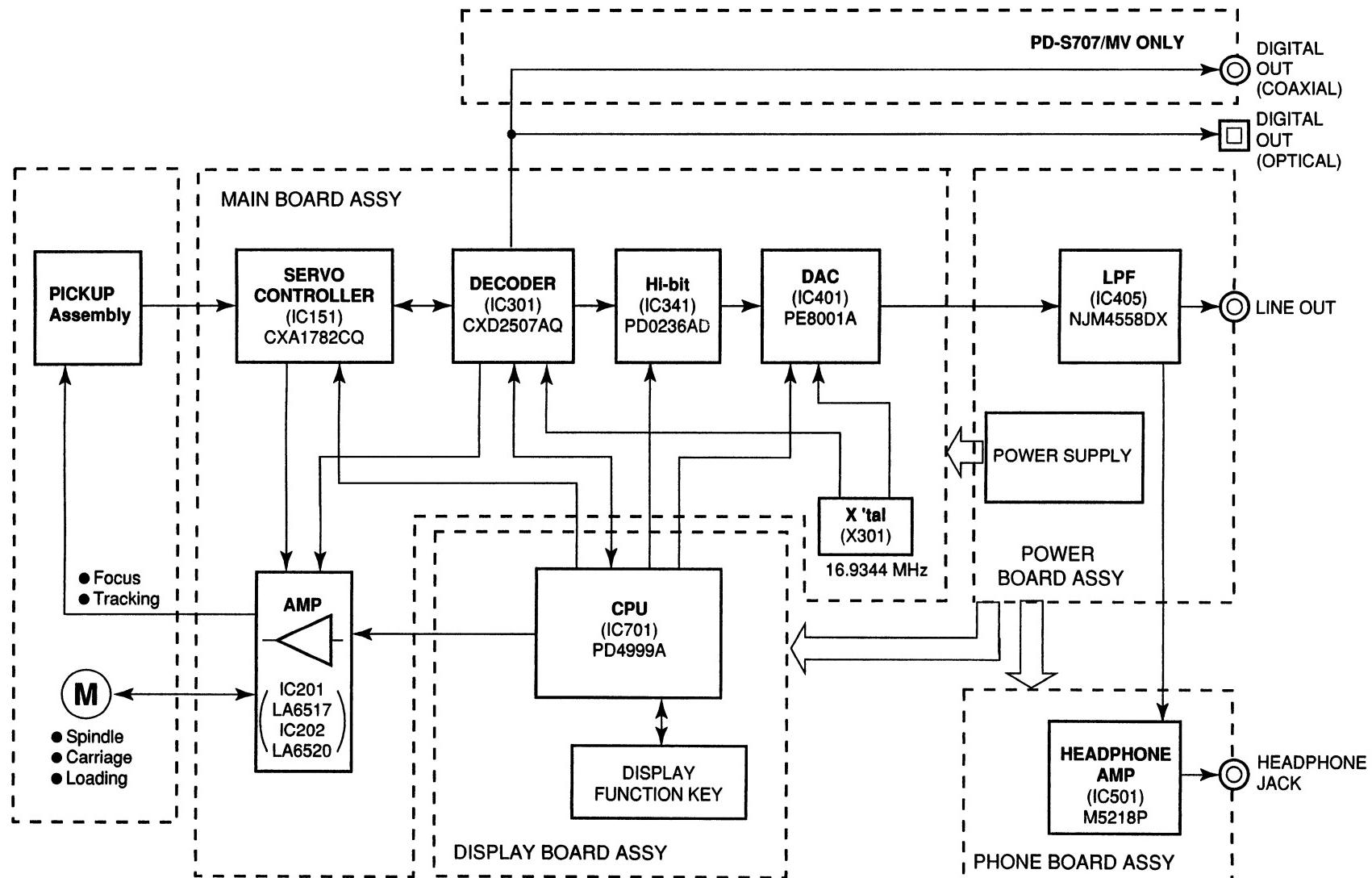


● Anode Connection

	12G	11G	10G-3G	2G	1G
P1	2	1	r	r	r
P2	3	9	h	h	h
P3	4	►	a	a	a
P4	5	DISP OFF	b	b	b
P5	6	RCM	c	c	c
P6	7	REPEAT	d	d	d
P7	8	1 ▷	e	e	e

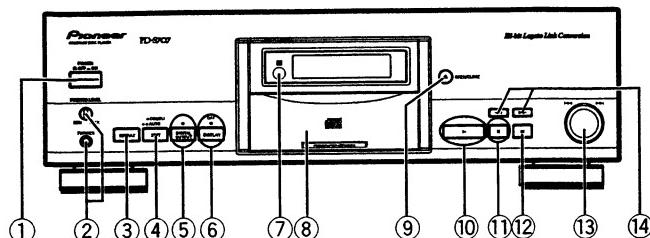
	12G	11G	10G-3G	2G	1G
P8	10	—	f	f	f
P9	11	PCM	g	g	g
P10	12	TRACK	m	m	m
P11	13	COM	j, p	j, p	j, p
P12	14	• EDIT •	—	col	—
P13	15	AUTO	k	k	k
P14	⇒	INDEX	n	n	n

7.3 BLOCK DIAGRAM



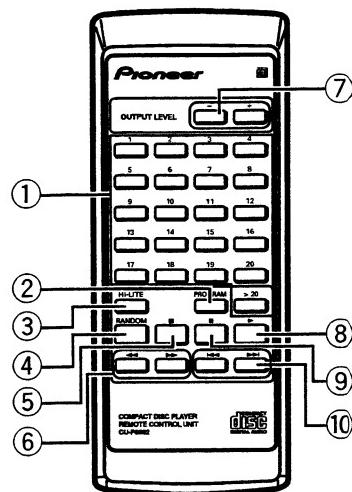
8. PANEL FACILITIES AND SPECIFICATIONS

■ PANEL FACILITIES



FRONT PANEL

- ① POWER switch
- ② PHONES jack and PHONES LEVEL knob
- ③ REPEAT button
- ④ COMPU/AUTO EDIT button
(• COMPU / •• AUTO)
- ⑤ DIGITAL OUTPUT button and indicator
- ⑥ DISPLAY button and OFF indicator
- ⑦ Remote sensor
Receives the signal from the remote control unit.
- ⑧ Disc tray
- ⑨ OPEN/CLOSE button (▲)
- ⑩ Play button (▶)
- ⑪ Pause button (II)
- ⑫ Stop button (■)
- ⑬ Track search knob (◀◀/▶▶)
- ⑭ Manual search buttons (◀◀/▶▶)



REMOTE CONTROL UNIT

Remote control buttons with the same names or marks as buttons on the front panel of the player control the same operations as the corresponding front panel buttons.

- ① Track number/Digit buttons (1-20, >20)
- ② PROGRAM button
- ③ HI-LITE button
- ④ RANDOM button
- ⑤ Stop button (■)
- ⑥ Manual search buttons (◀◀/▶▶)
- ⑦ OUTPUT LEVEL buttons (-/+)
- ⑧ Play button (▶)
- ⑨ Pause button (II)
- ⑩ Track search buttons (◀◀/▶▶)

■ SPECIFICATIONS

1. General

Type	Compact disc digital audio system
Power requirements	
U.K. and European models	AC 220 - 230 V, 50/60 Hz
Australian model	AC 230 - 240 V, 50/60 Hz
Multi-voltage model	AC 110 / 120-127 / 220-230 / 240V (Switchable), 50/60Hz
Power consumption	14W
Operating temperature	+5°C - +35°C
Weight	7.2 kg
External dimensions	420 (W) x 374 (D) x 128 (H) mm

2. Audio section

Frequency response	4 Hz - 20 kHz
S/N ratio	110 dB or more (EIAJ)
Dynamic range	96 dB or more (EIAJ)
Harmonic distortion	0.004% or less (EIAJ)
Output voltage	2.1 V
Wow and flutter	Limit of measurement (±0.001% W.PEAK) or less (EIAJ)
Channels	2-channel (stereo)

3. Output/Input terminals

Audio line output jacks
Optical digital output jack
Coaxial digital output jack (U.K. model only)
Phones output jack
CD • DECK SYNCHRO jack
CONTROL IN/OUT jacks (Australian model only)

4. Accessories

● Remote control unit	1
● AAA/R03 dry cell batteries	2
● Output cable	1
● Operating instructions	1
● Control cable (Australian model only)	1

NOTE:

Specifications and design subject to possible modification without notice, due to improvements.